SHOOTING STAR MEETS THE NAVY'S BLUE ANGELS

AIR CLASSICS

Where History Flies

DECEMBER 2025 · Vol.61/No.12

WILDCAT WARRIORS

JOE FOSS AND HIS VMF-121 FLYING CIRCUS FIGHT THE JAPANESE OVER GUADALCANAL

HAMPDEN RETURNS

NEARLY EXTINCT WWII RAF BOMBER GOES ON DISPLAY

COST OF WAR

RARE WWII COMBAT PHOTOGRAPHS

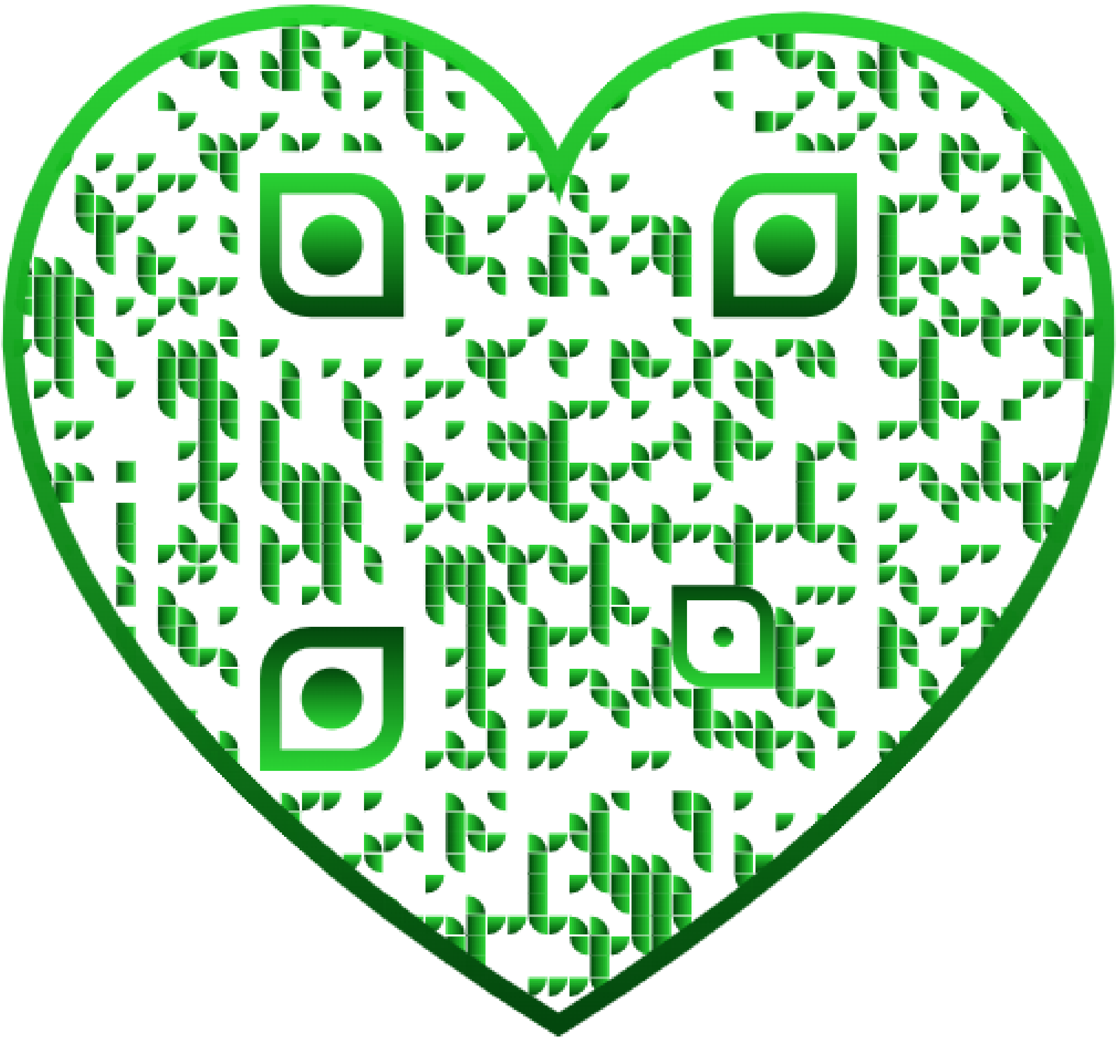
OVER THE TRENCHES

AMERICAN HERITAGE MUSEUM RESTORES A CAUDRON G.4

ATTACK OF SONDERKOMMANDO BLAICH

IMPROBABLE LUFTWAFFE LONG-DISTANCE ATTACK ON A VITAL AIR BASE

CHALLENGE PUBLICATIONS, INC.
www.challengeweb.com
U.S./CANADA $9.99
12
0 74666 02558 5



HONOR & REMEMBER

26,000 young Eighth Air Force airmen gave their lives in WWII. The National Museum of the Mighty Eighth Air Force will honor them in a new permanent exhibition, *Service Above Self*.

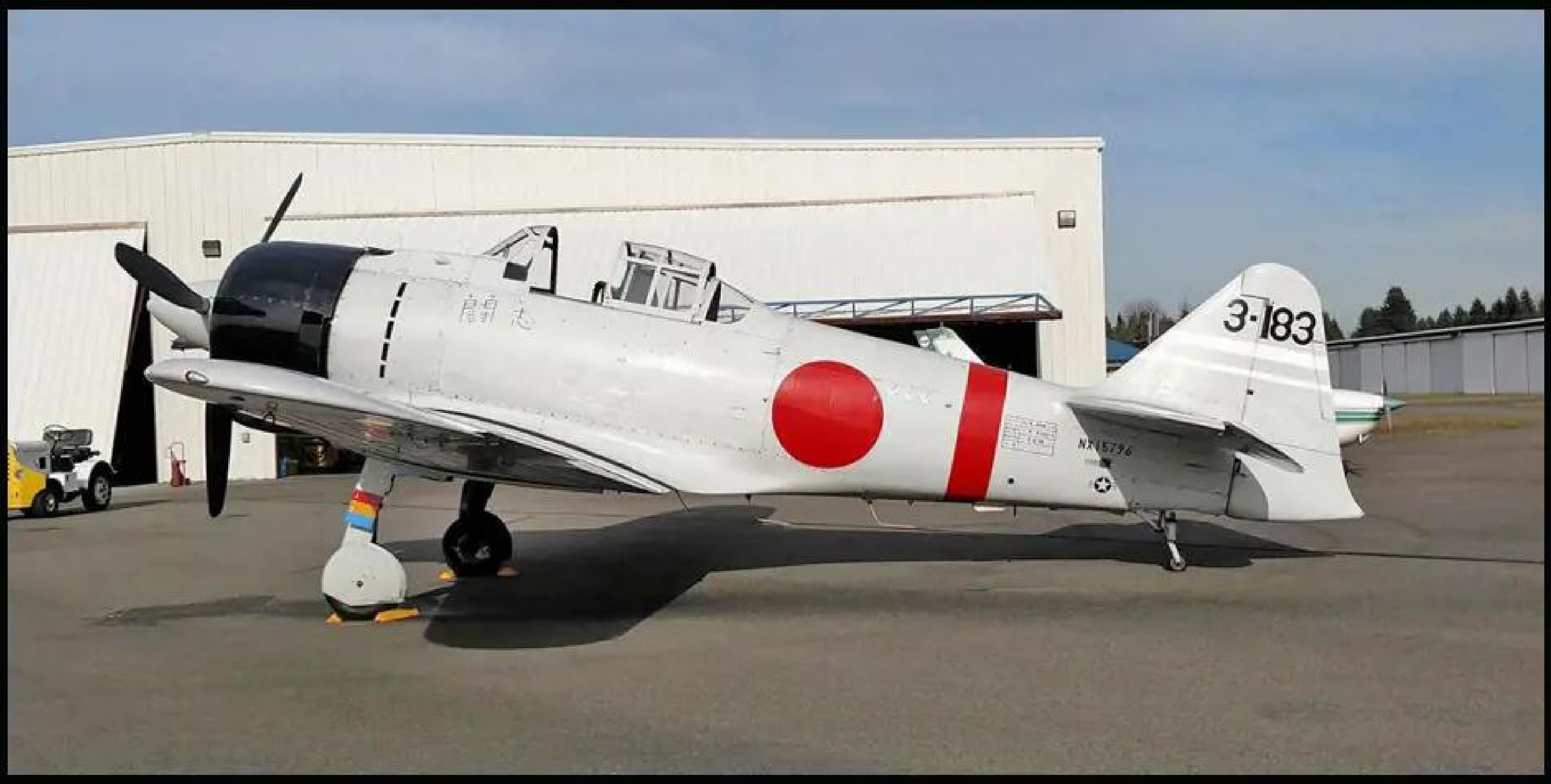
With a $100 gift, you'll receive a dog tag representing one fallen hero. A duplicate tag will be displayed in their memory.

Honor & Remember their extraordinary courage—so their legacy lives on.

Scan to donate now

National Museum of the Mighty Eighth Air Force
www.mightyeighth.org

PLATINUM
FIGHTER SALES
OFFERED FOR SALE



1952 CANADIAN CAR & FOUNDRY HARVARD MKIV
S/N CCF4-16 N15796

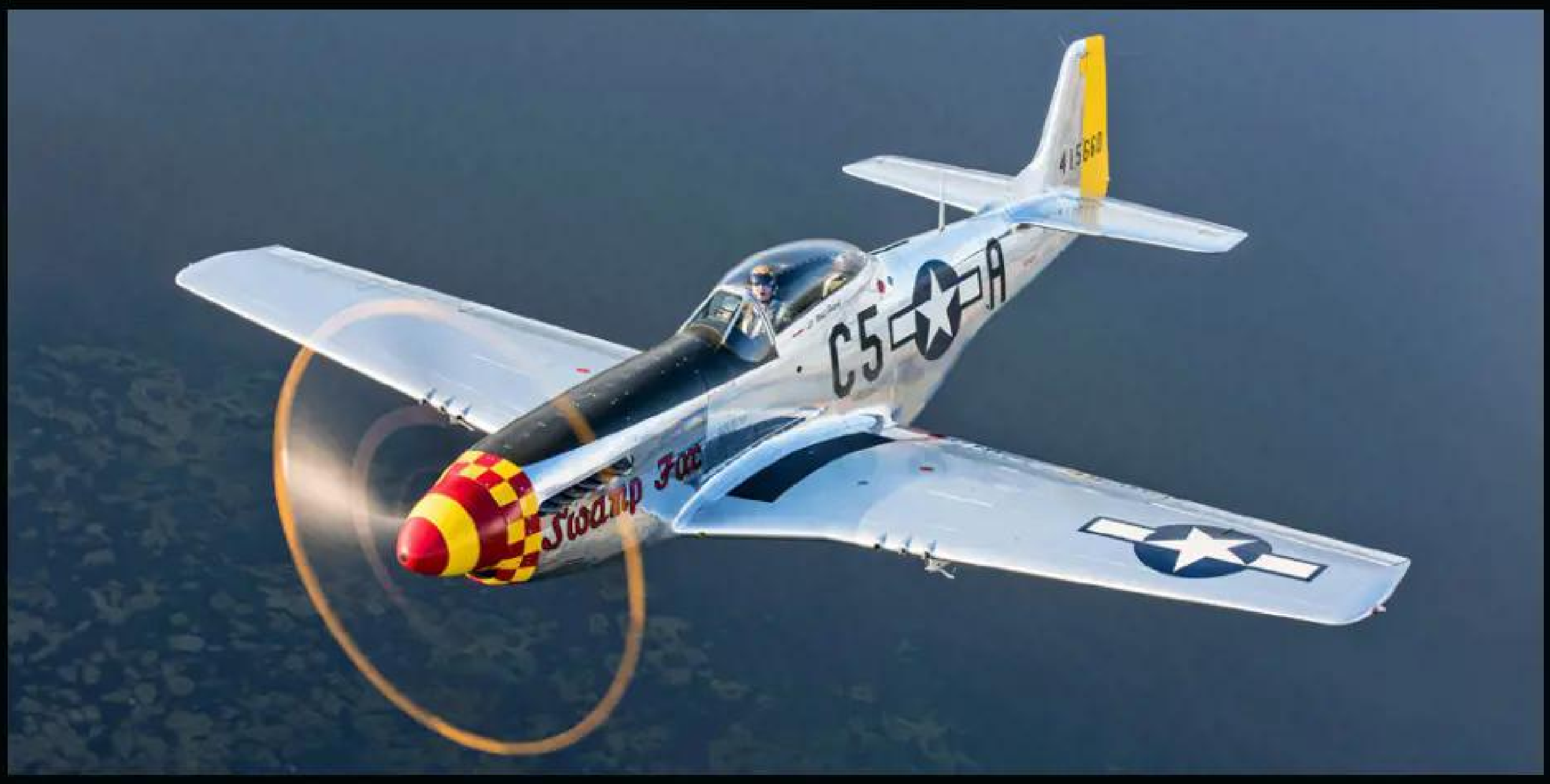


Photo Credit: Scott Slocum

1944 NORTH AMERICAN P-51D "SWAMP FOX"
s/n 44-74202 Reg: N5420V

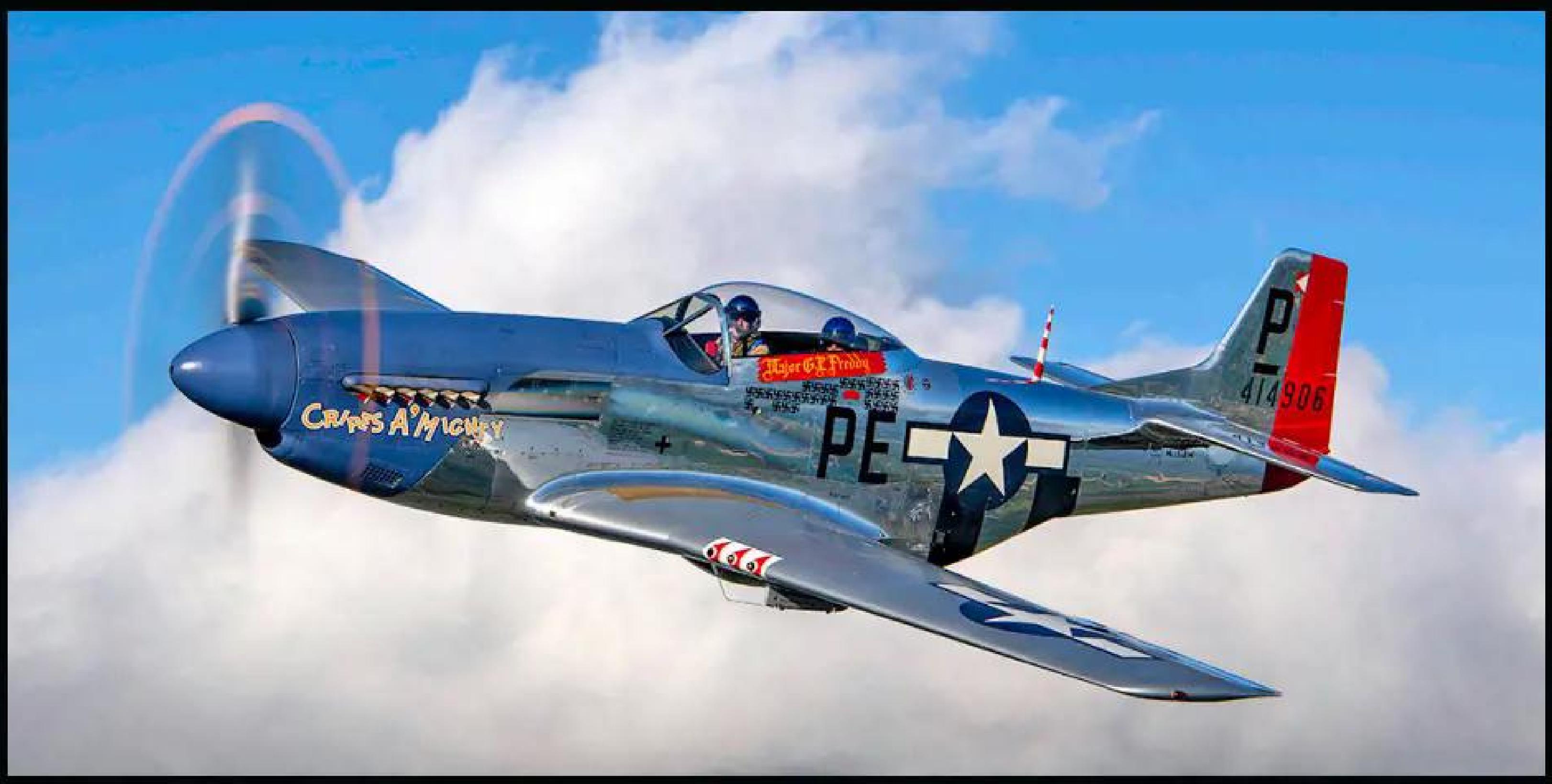
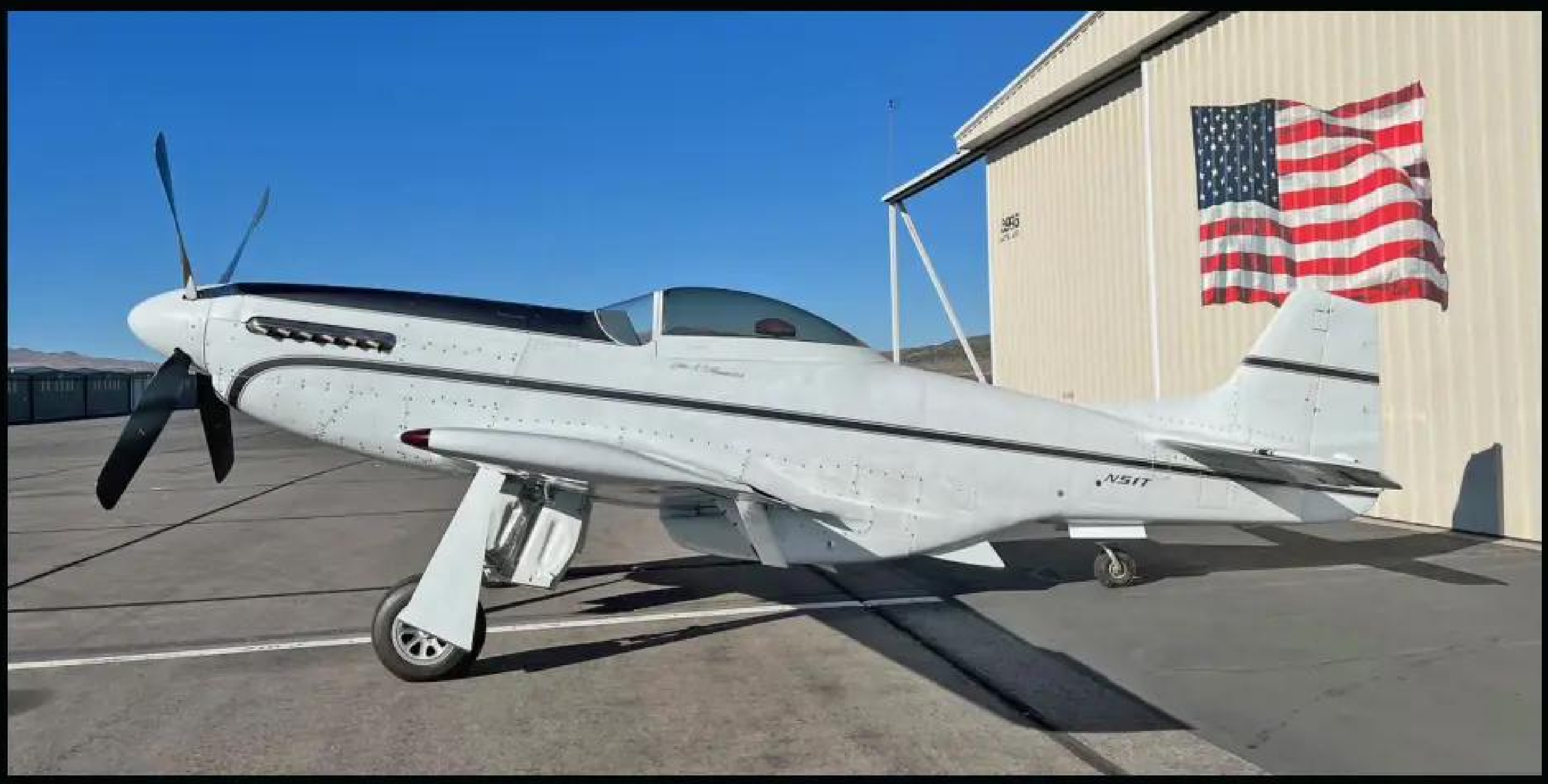
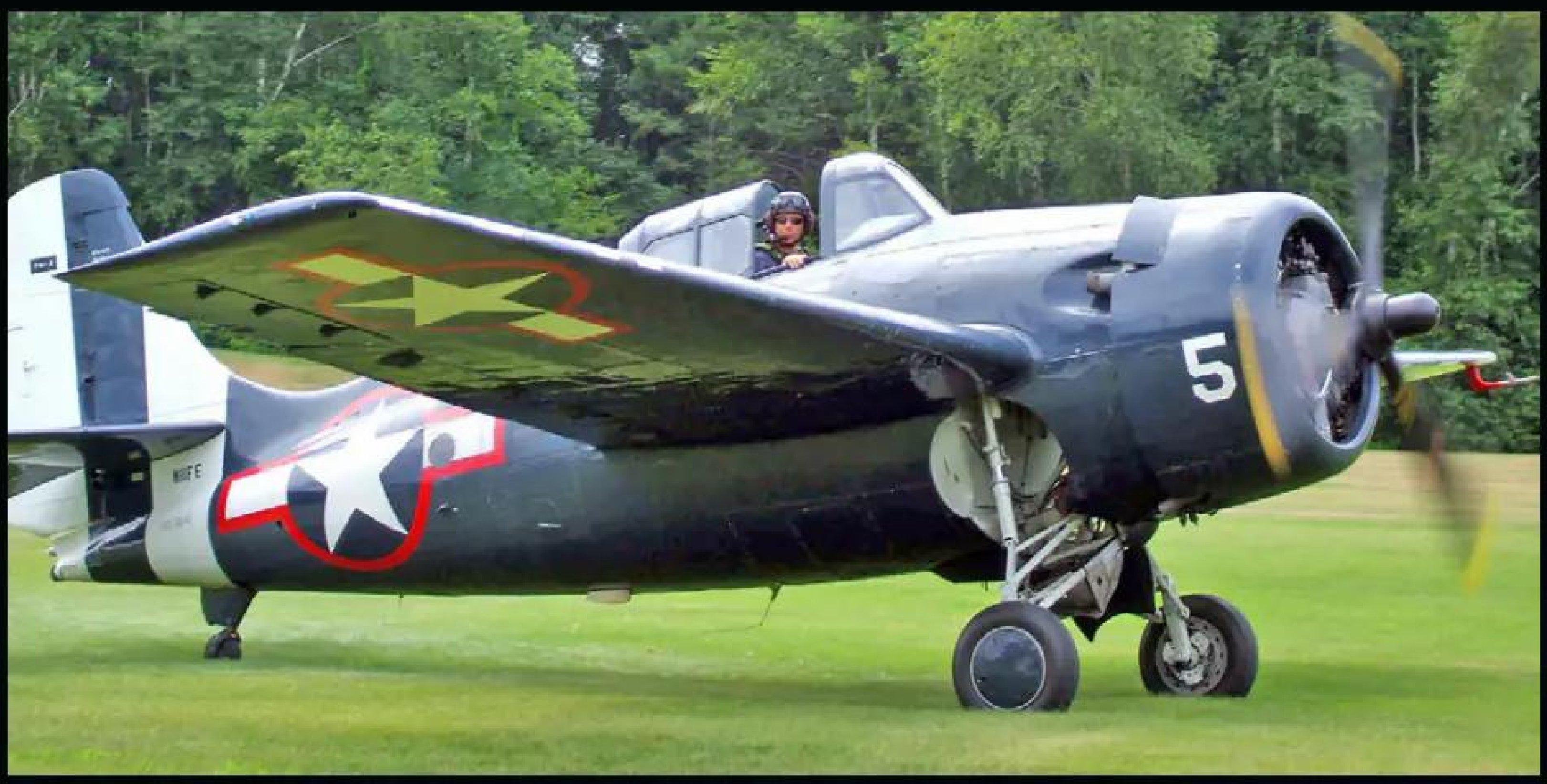


Photo Credit: Scott Slocum

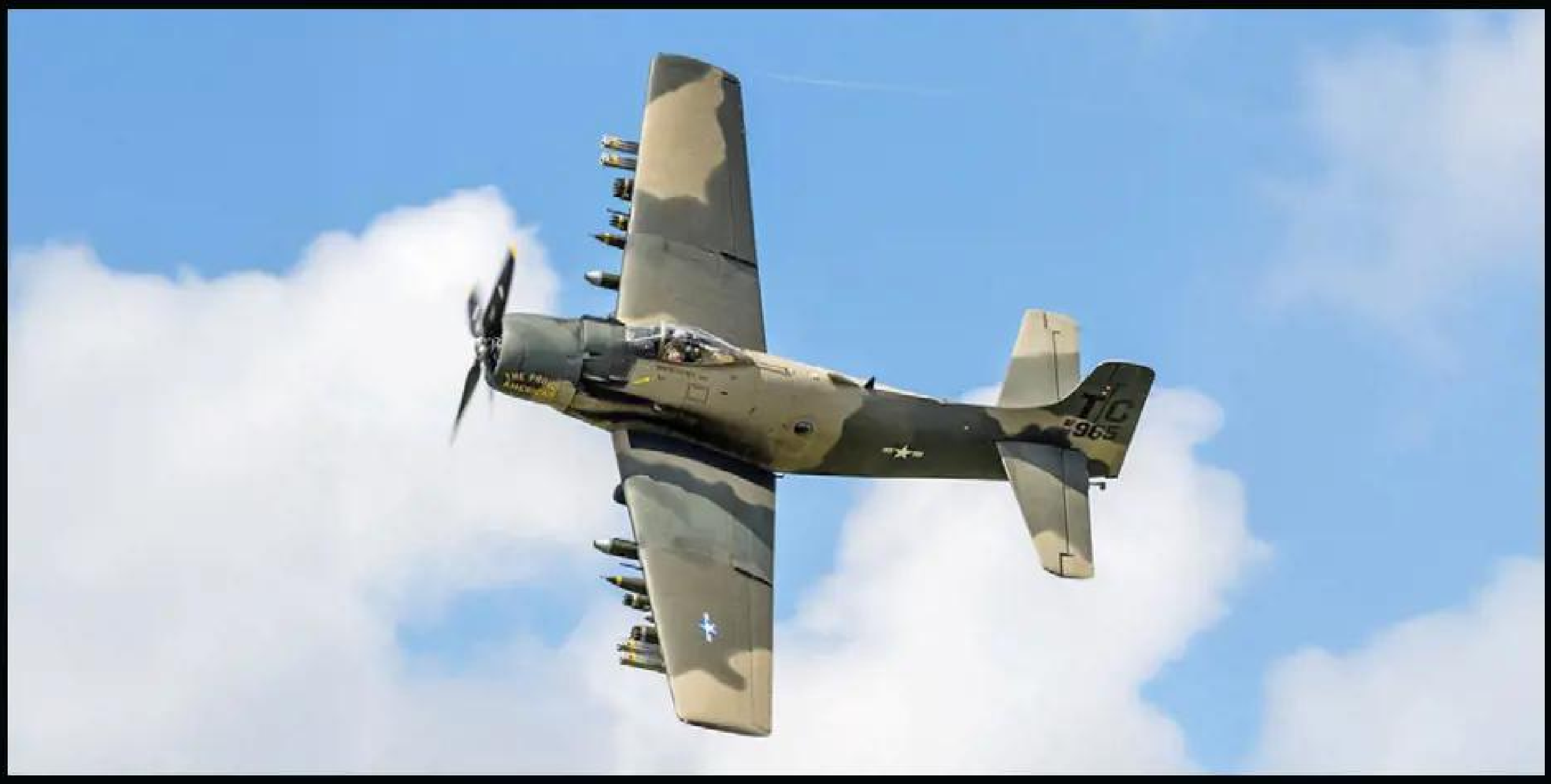
1944 NORTH AMERICAN P-51D "CRIPES A MIGHTY"
s/n 44-74813 N151BW



1945 NORTH AMERICAN P-51D
s/n 45-11571 N51T



1945 GRUMMAN FM-2 WILDCAT
Bu. Num 86680 Reg: N11FE



1952 DOUGLAS AD-4NA
s/n 126965 N965AD

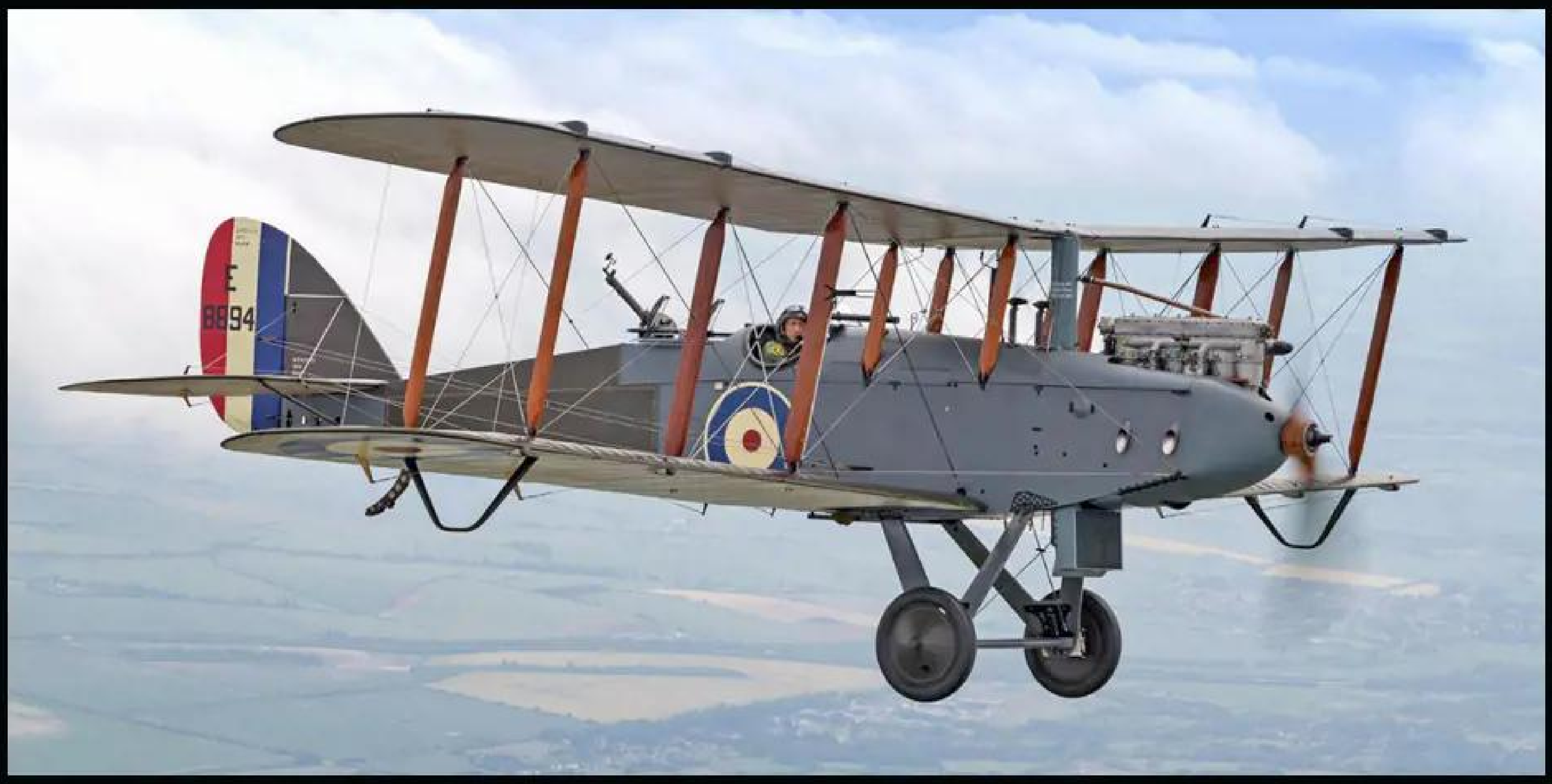
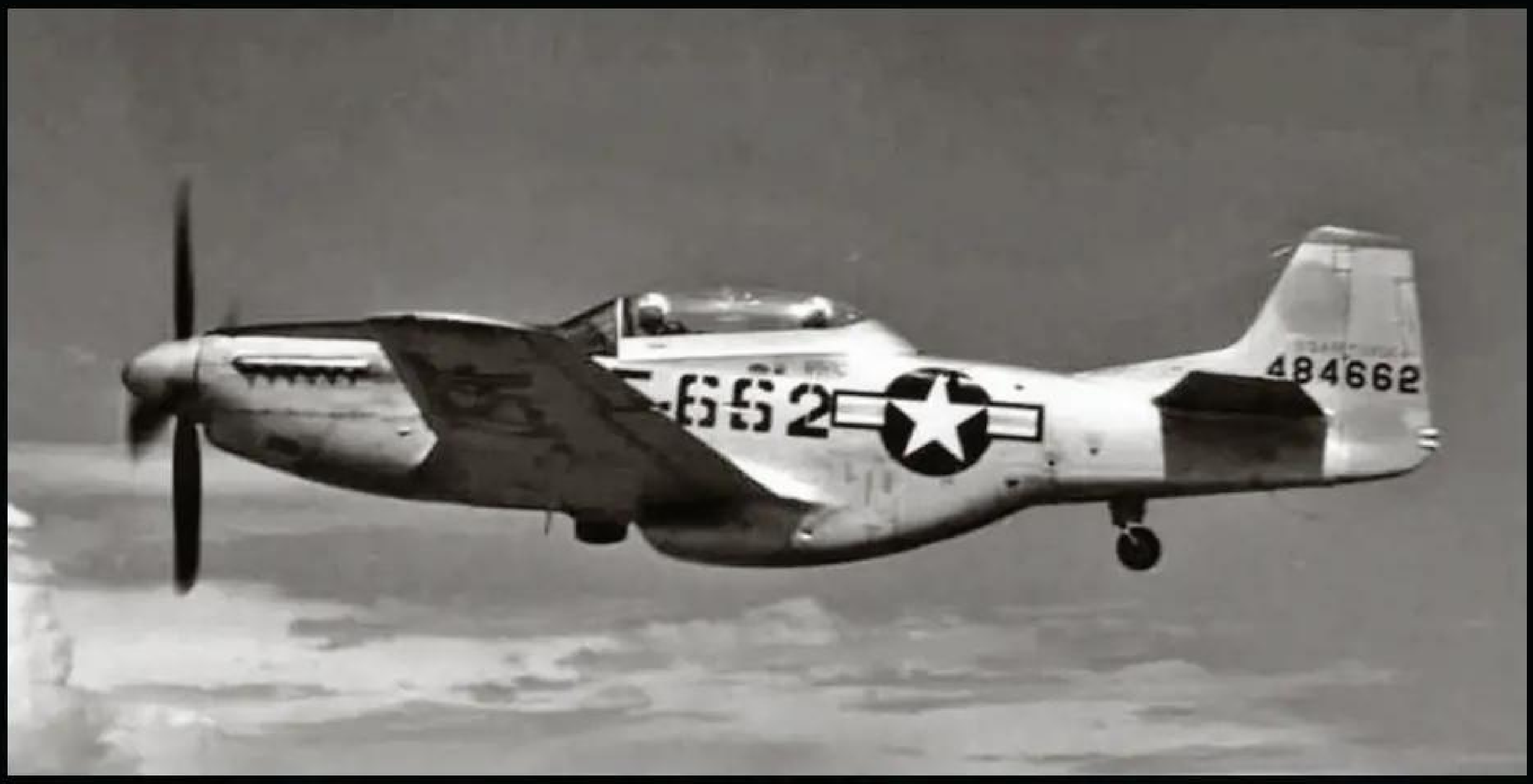


Photo Credit: Darren Harbar

1918 AIRCRAFT MANUFACTURING CO. LTD DH.9
s/n 1414 G-CDLI (UK)



1944 NORTH AMERICAN TF-51D MUSTANG
(FULL DUAL CONTROL) | s/n 44-73518N N5483V

Contact: **1.800.210.1951** • **sales@platinumfighters.com**

PLATINUM FIGHTER SALES *Purveyors of the World's Finest Historic Aircraft*
www.platinumfighters.com

Contents

DECEMBER 2025
VOLUME 61 / NUMBER 12

Features

36 ATTACK OF SONDERKOMMANDO BLAICH
This little-known Luftwaffe *unit — with one bomber, one light aircraft, a convertible car, and a loaned Italian transport — set out to make the* Luftwaffe's *longest bomber raid on a vital target / by Rene Blauenstein*

46 WILDCAT WARRIORS
How the Grumman F4Fs of VMF-121, operating under terrible conditions and facing heavy odds, took on and defeated the best the Japanese had to offer / by Steve Blake

58 COST OF WAR
Selection of rare photographs from our files illustrating the terrible cost of World War Two / by Michael O'Leary

Departments

6 MESSAGE FROM THE PUBLISHER

8 WARBIRD & CLASSIC REPORT
All the latest international vintage aviation news plus reports on the latest aircraft for the American Heritage Museum, RAF Museum's Handley-Page Hampden, and flying a T-33 with the Blue Angels / by Doug Fisher

32 LOG ENTRIES
By purchasing an exact duplicate of the Ryan Spirit of St. Louis, *the Japanese hoped to set a number of record flights. It did not work out as they planned / by Mark Bingham*

COVER: The great US Marine Corps ace Joe Foss in the cockpit of his Wildcat. (USMC)

THESE PAGES: As we note in "Warbird & Classic Report," this Curtiss P-36 is now on its way back to the USA for new owner Walt Bowe. In the photograph, Steve Hinton is seen coming in for a landing at Chino following the plane's second flight. Photography by Michael O'Leary

Society of
AIR RACING
HISTORIANS
GOLDEN
PYLONS

84 **FRIDAY NIGHT OLDIES**
Rare Kodachromes of surplus military aircraft / by Doug Fisher

92 **DOWN MEMORY'S RUNWAY**
American aircraft from aviation's glorious past / by Norm Taylor

94 **AIRLINES**
News and views from the readers of Air Classics

PA
50
NX80FR

Editorial & Production Staff

Michael O'Leary • Publisher/Editor • *moleary2challenge@gmail.com*
Matt Rippetoe • Art Director
Susan Duprey • Production Manager • *ed@challengeweb,.com*
Roger Cain • Social Media Manager/Antique Aircraft Editor • *jollyrogercain@comcast.net*
Ben Marsh • Northern California Editor • *ben_marsh@sbcglobal.net*
Steve Cox • Artist in Residence • *stevecox21@hotmail.com*
Bruce Orriss • Aviation Films Editor • *bruceorriss@gmail.com*
Doug Fisher • Warbird and Classic Report Editor • *dougsfno@cogeco.ca*
Jim Larsen • Air Racing Editor • *filmandflight@yahoo.com*
Bruce Lockwood • Technical Editor • *lockwoodaviation@yahoo.com*
Philip Makanna • WWI Aviation Editor • *phil@ghosts.com*
Ralph M. Pettersen • Propliner Editor • *rmpettersen@gmail.com*
Joe Scheil • Jet Warbirds Editor • *pbydreams@aol.com*
Tim Weinschenker • Golden Pylons Editor • *pylonguy2003@yahoo.com*
Steve Whitby • Air Tanker Editor • *srwhtby@verizon.net*
Howard Carter, **Keith Charlot**, **Jim Dunn**, **William T. Larkins**, **Gerald Liang**, **Norm Taylor**, **James Thompson**, **Marshall Wainwright**, **Mark Watt** • Contributors

Editorial & Advertising Offices

AIR CLASSICS, 9800-D Topanga Canyon Blvd., Chatsworth, CA 91311
Tel: 818.700.6868 (8:00-4:00 PST Mon.-Thurs.); FAX: 818.700.6282
E-mail: *mail@challengeweb.com*
Web: *www.challengemagazines.com*

Subscription Offices

AIR CLASSICS, PO Box 16149, North Hollywood, CA 91615
Tel: 818.286.3124
Toll-Free: 800.562.9182 (Continental US Only) (9-5 PST Mon.- Fri.)

www.challengeweb.com

PROUDLY PRINTED IN USA

AIR CLASSICS (ISSN 0002-2241) is published monthly by Challenge Publications, Inc., 9800-D Topanga Canyon Blvd., Chatsworth, CA 91311.

Copyright ©2025 by Challenge Publications, Inc. All rights reserved. Nothing in whole or in part may be reproduced without written permission of the publisher.
Send editorial and advertising material to 9800-D Topanga Canyon Blvd., Chatsworth, CA 91311. Publisher assumes no responsibility for unsolicited material. All photos, artwork, and manuscripts must be accompanied by stamped self-addressed return envelope.

POSTMASTER — Send address changes to AIR CLASSICS, PO Box 16149, North Hollywood, CA 91615. Please give six to eight weeks advance notice of address change. Send old and new address plus recent mailing label, if available. Subscription rate: US and possessions, one year — $89.95; Canada, Mexico, and other foreign countries — $103.95 (US funds). Periodicals postage paid at Chatsworth, CA, and additional mailing offices.

FOLLOW US ON FACEBOOK — *facebook.com/airclassicsmagazine* • VISIT US ONLINE — *airclassicsmagazine.com*

MESSAGE FROM THE PUBLISHER

War and Remembrance — a so, so novel by Herman Wolk and a really forgettable 1988 television mini-series that was a sequel to the same author's *The Winds of War* which some television critics suggested should have been retitled as *The Winds of Bore*.

While we are not attempting to function as critics of Mr. Wolk's works, we must admit that a great deal of the content of *Air Classics* is focused on war — and remembrance.

How does that work? Over the years, I have fond memories of many WWII pilots and aircrew members sitting in my office. At first some would be reluctant to discuss their experiences. Producing a pile of photos would often open the flood gates of memory and they would begin pointing at certain things on a print and then say "I remember that."

I really thought these individuals would last forever. They didn't. None of us do.

The late Doug Champlin once had a wonderful gathering of three pilots from the Great War at his now much-lamented Champlin Fighter Aces Museum at Falcon Field in Mesa, Arizona. All three were quite frail but they were gracious, full of energy, and answered the many questions fielded to them. All were gone within six months following the event.

We just can't take anything for granted — yet we do. I am certainly a prime example. If I can put something off for a day, I will. This sometimes leads to unforeseen problems or situations. I clearly recall putting off a photo mission on an historic Warbird and the next day it, and the pilot, was a smoking hole in the ground.

Why do we have this fascination with wars and the aircraft that flew in them? It is difficult to define. A friend once said, "It's all the same war. It just has different names." There is an element of truth to his statement and we have certainly seen that over the past couple decades with the "endless" wars in the Middle East. I was recently reviewing newspaper clippings from over seven decades ago and the headlines seemed like they were written today with stories of constant strife in the Middle East and other areas of the globe.

I think our interest comes in several ways. First, many of us enjoy the history of manned flight and how it has progressed in the last 122 years. From those fragile fabric-covered wooden creations that could hop only a few hundred feet, to the developing warplanes that fought over the trenches of Europe, to the incredibly fast discoveries in aeronautics during the 1930s that would lead to a series of aircraft with only one purpose — war. As Americans, I think we take a certain satisfaction that we were able to go from a very weak position in 1941 to the world's greatest superpower by 1945. We met and defeated the Axis on their own ground and grew incredibly strong while Europe seemed to shrink and recede. Then came the Cold War and the largest build-up of global military power that encompassed many nations. Today, we have a technologically superior military but it has to face nations with more soldiers, more ships, more missiles, and more aircraft. Numbers play a big part in any war and, today, I am afraid that when it comes to just numbers that we are down on the list.

That brings me back to war and remembrance. During the Vietnam War — truly one of the most terrible episodes this nation has ever faced as a war run by incompetent politicians caused thousands of young Americans to die — there were several interesting reactions from the public. As the number of American prisoners increased, does anyone remember the copper bracelets that could be purchased and worn with the name of a POW engraved into the metal? I had one that I wore for many years while in school. It served as a reminder that some fellow American was imprisoned and being tortured by the North Vietnamese while this government did little to rectify the situation. Today, that bracelet is buried in some drawer. Not particularly forgotten, but perhaps looked upon as a time past.

That brings me to Don Brooks. Don is well-known to the readers of *Air Classics* for his many patriotic efforts to preserve the memories of the Second World War. Don was instrumental in setting up plans for the recovery of the Lockheed Lightning that became known as *Glacier Girl* — flying his own historic D-Day C-47 to Greenland to aid in the recovery effort. This was a massive undertaking that eventually brought a P-38 out of its tomb where it was buried under hundreds of feet of ice. The plane was returned to the USA and meticulously restored back to flying condition. Now with Rod Lewis, *Glacier Girl* is a rare living artifact that we can all see, enjoy… and remember.

Don realized that the numbers of the Greatest Generation were rapidly dwindling and that is when he went to great effort and expense to restore the B-17G that became known as *Liberty Belle*. It was a bomber that honored his father and all the servicemen that flew on the type. *Liberty Belle* was extensively toured throughout the United States and gave thousands of people their first opportunity to fly in the magnificent Boeing. *Liberty Belle* also flew the Atlantic to tour the bases of the United Kingdom and Europe. It was great success.

A Curtiss P-40E would be added to the touring fleet of the Liberty Foundation and many people enjoyed a flight in the aircraft's second seat. As we noted in the last issue, *Liberty Belle* came to an unfortunate end following a forced landing and what, in my opinion, was a failure of the local fire department to put out the small fire that eventually consumed much of the bomber. Don is not one to give up easy. He gathered what was left, moved the remains back to his base in Douglas, Georgia, and is now well on the way to creating a new *Liberty Belle*.

At his home field, Don was instrumental in saving many of the original WWII structures from when Douglas was home to a major training base. Due to his efforts, we now have the World War II Flight Training Museum. This museum shows what life was like for the WWII students as they entered primary training on their way to become combat aviators over Europe and the Pacific. It is probably the most intact of the surviving training facilities and it is open for all to see, learn, and, once again, remember.

With the Greatest Generation nearly gone, the responsibility of remembrance has fallen upon their sons and daughters. Yet that group, known as the "Baby Boomers," is also aging. Will their sons and daughters recall the sacrifices made decades ago in order for them to enjoy the lives they lead today? I really wonder… and worry.

Today, Don is also the Chairman of the Board of Trustees at the National Museum of the Mighty 8th Air Force in Pooler, Georgia. This expanding museum is doing a fabulous job on keeping the memory of the Mighty 8th alive and functioning. Over 26,000 young men died while in service with the 8th during the most intensive aerial battles the world has ever seen.

In this important position, Don states, "The more I learn about the great courage, sacrifice and dedication of our veterans, the more I feel obligated to do all that I can to honor them and to keep their memory alive."

The museum has come up with a great idea to do just that — much like the Vietnam War copper bracelets. For the donation of just $100, you can receive a dog tag for one of the 26,000 that fell in combat. A matching dog tag will be placed in the museum. The dog tag will allow the owner to learn more about the person that sacrificed everything. As we head to the Christmas season, this also makes a wonderful gift. For more information, please see the advertisement on Cover 2. For all readers of *Air Classics* this is a chance to do something meaningful and something that will make all of us… remember.

MICHAEL O'LEARY/PUBLISHER
CHALLENGE PUBLICATIONS
moleary2challenge@gmail.com

SHOOTING STAR MEETS THE NAVY'S BLUE ANGELS
DECEMBER 2025 • Vol.61/No.12
AIR CLASSICS
Where History Flies
WILDCAT WARRIORS
JOE FOSS AND HIS VMF-121 FLYING CIRCUS FIGHT THE JAPANESE OVER GUADALCANAL
HAMPDEN RETURNS
NEARLY EXTINCT WWII RAF BOMBER GOES ON DISPLAY
COST OF WAR
RARE WWII COMBAT PHOTOGRAPHS
RECREATING GERMANY'S MASSIVE DO. X FLYING BOAT
CHINA BLITZERS!
SUICIDE ON A BUDGET
MOTH TO THE FLAME
THREE PILOTS AND AN ALBATROS
AIRBORNE WITH AMERICA'S ONLY FLYING CONSTELLATION
CONSTELLATION MAGNIFICENCE
JOSEPHINE TO THE RESCUE
COST OF WAR
LINDBERGH CONSPIRACY

ONE WAR, THREE AIR FORCES
DAWN OF A HELLCAT
AIR LEGENDS FOUNDATION
MUSTANG NAMED FRANCIS DELL
VINTAGE WINGS OVER OREGON
KEEPING THE AIRACOBRAS FLYING
FIGHTER PILOT REUNION

HEAD INTO A NEW YEAR WITH AIR CLASSICS!

60th ANNIVERSARY 1964/2024 AIR CLASSICS

EVERY MONTH: THE VERY BEST IN AVIATION HISTORY

Now celebrating its 61st Anniversary, AIR CLASSICS is North America's LARGEST selling aviation history magazine as well as the world's OLDEST in that field.

WE OFFER REAL AVIATION HISTORY WITH NO REVISIONISM AND NO APOLOGIES!

GET AIR CLASSICS EVERY MONTH JUST $79.95

FOR TWELVE ISSUES (just $6.67 per issue)

○ Please rush my subscription of 12 issues for just $79.95

NAME ______________________________

ADDRESS ______________________________

____

CITY ______________________________

STATE ____________________ ZIP __________

SPECIAL! **Give a GIFT SUBSCRIPTION!**

○ Sign Up a Friend for Just $74.95 — A $5 Discount!

NAME ______________________________

ADDRESS ______________________________

____

CITY ______________________________

STATE ____________________ ZIP __________

○ Payment Enclosed

○ VISA

○ MasterCard

○ Renewal

○ New

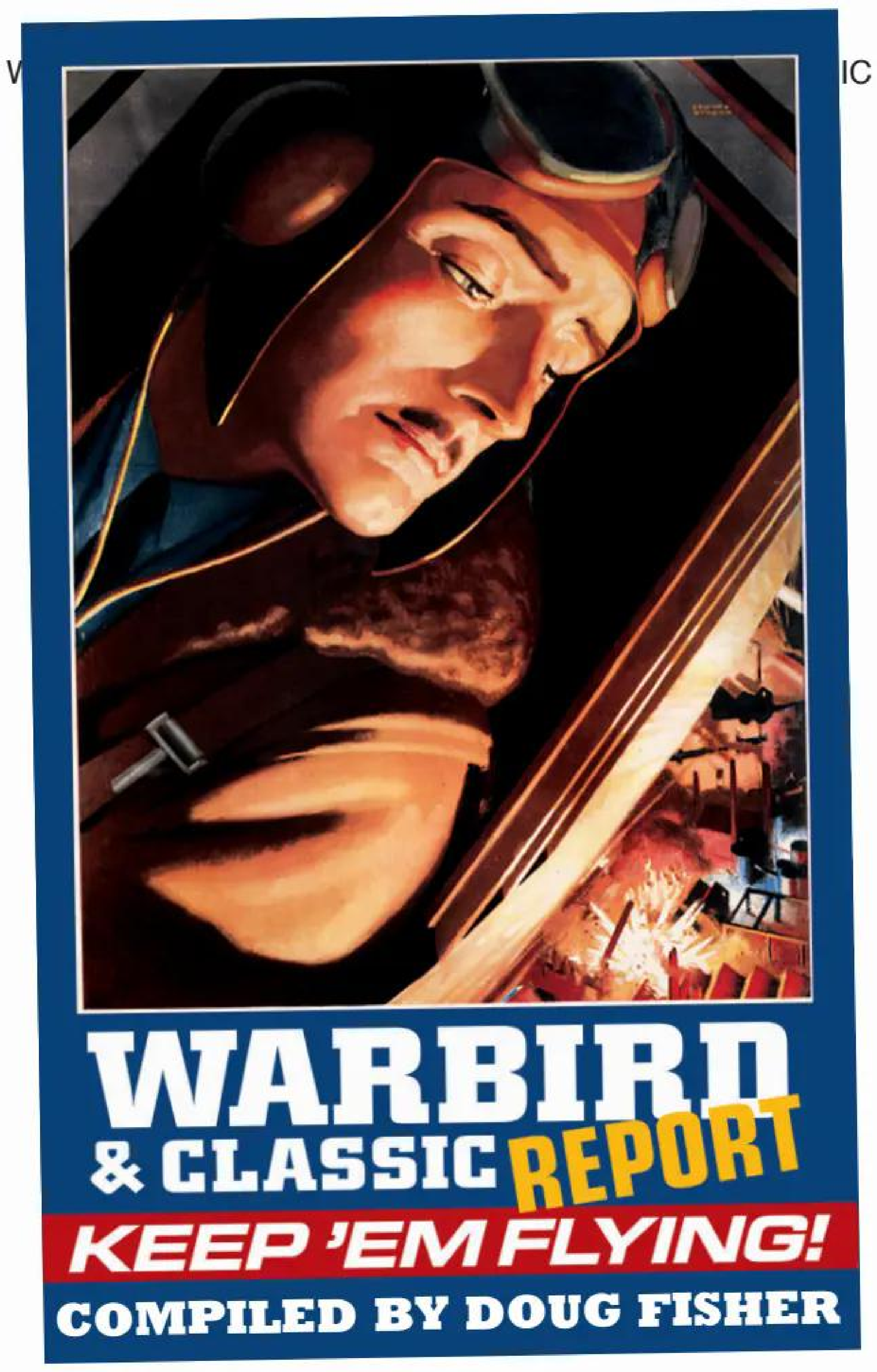
ACCOUNT NUMBER ______________________________

EXPIRATION DATE ________/__________

SIGNATURE ______________________________

SEND TO: SUBSCRIPTION DEPARTMENT
CHALLENGE PUBLICATIONS, INC.
P O BOX 2474
Chatsworth, CA 91311-2474 USA

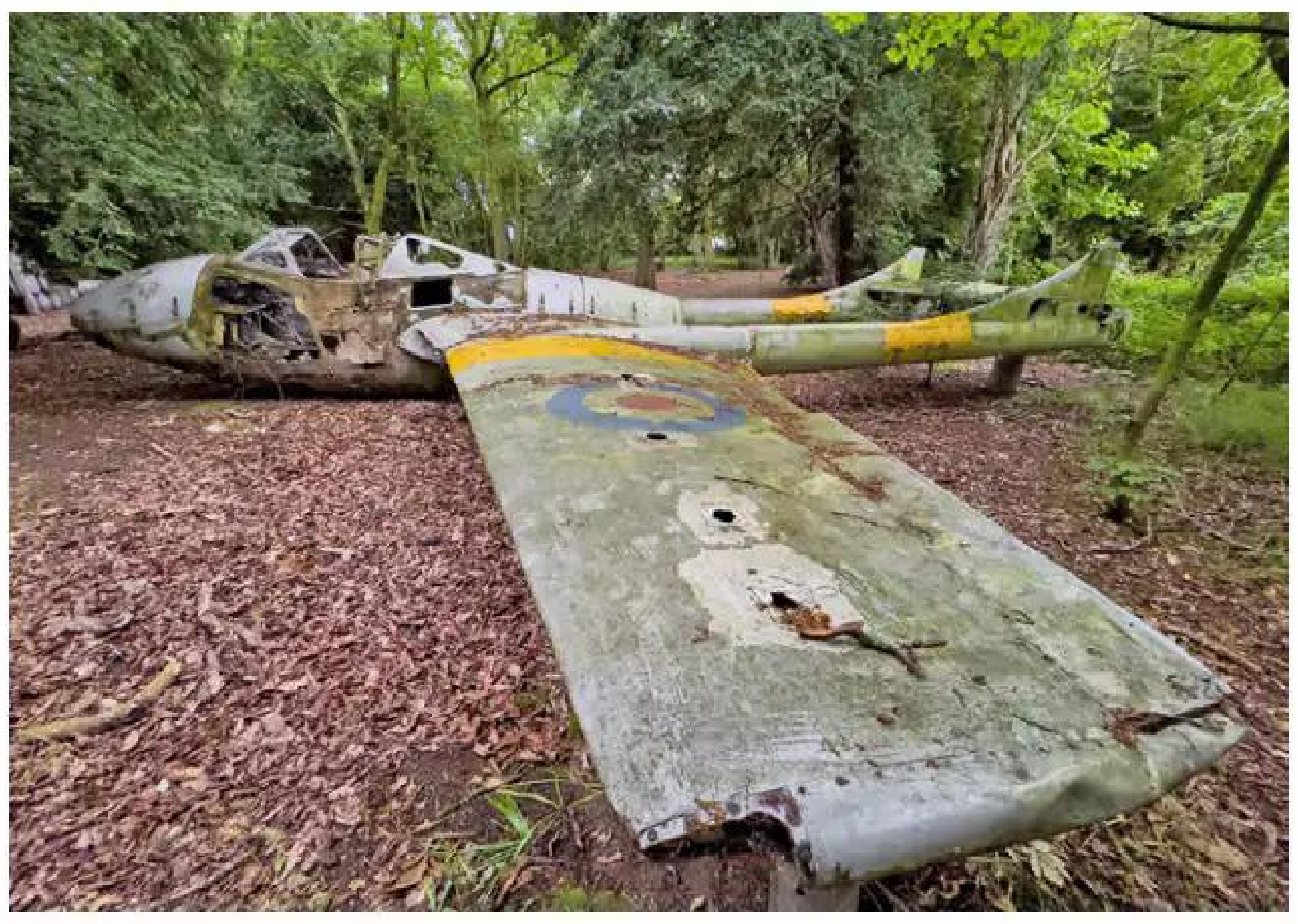
AIR CLASSICS For subscriptions mailed outside the US, please add $36 for a 12-issue subscription. Payment must be in US funds only.



WARBIRD & CLASSIC REPORT

KEEP 'EM FLYING!

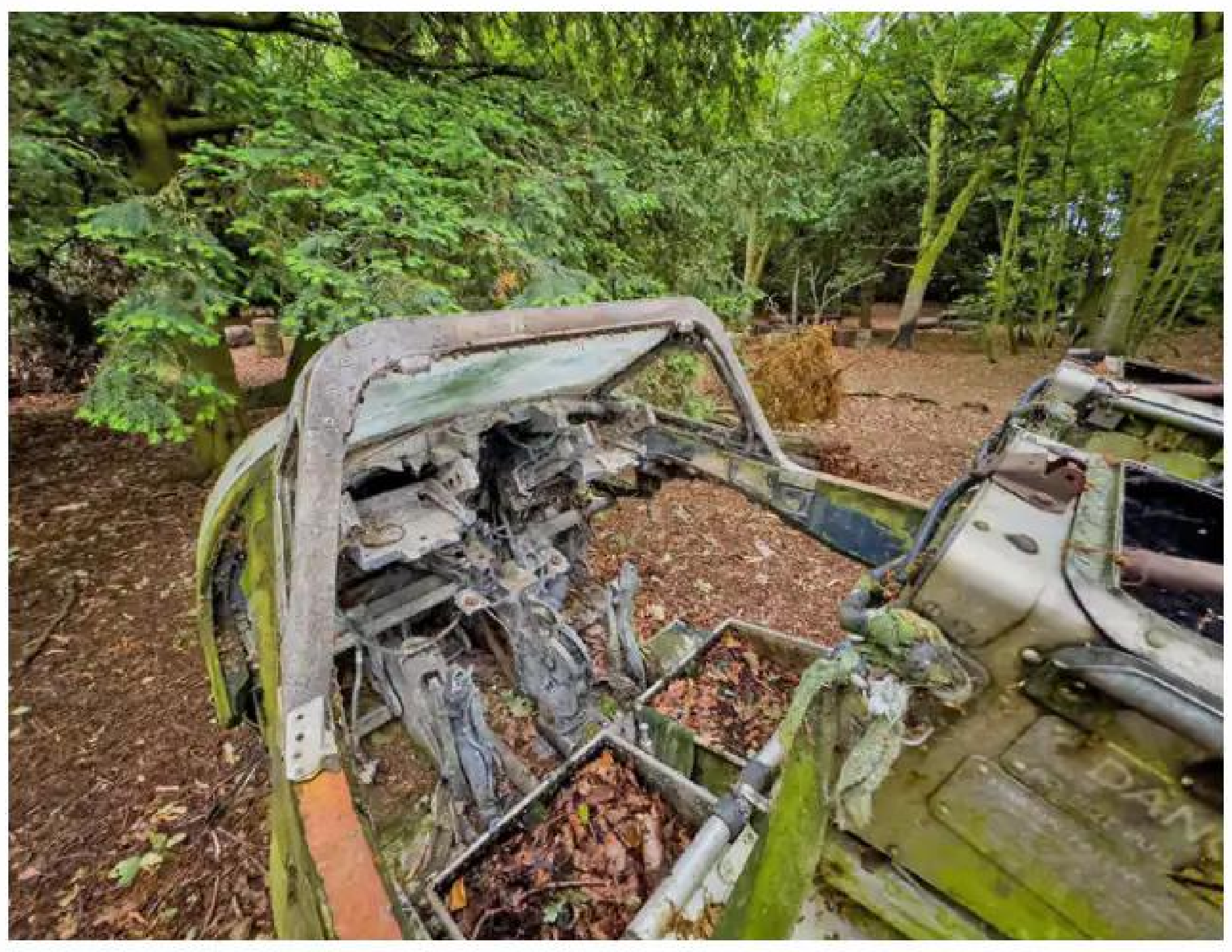
COMPILED BY DOUG FISHER



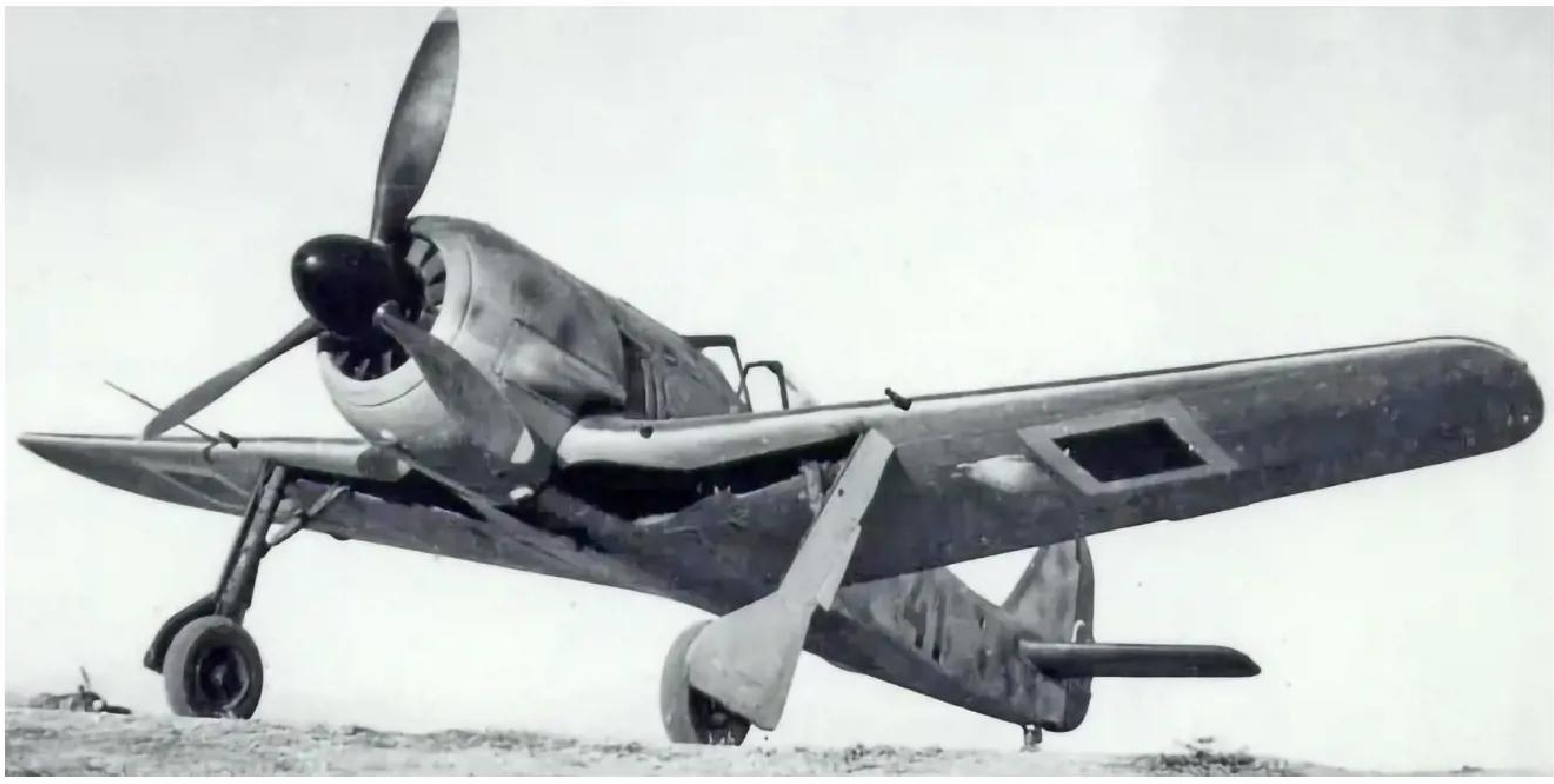
As can be seen, the Vampire is in very poor condition at the former paintball site.

RETURNING TO NATURE

The "sport" of paintball usually means that the operators of such facilities like to obtain all sorts of derelict military vehicles so their clients can run around, play soldier, and shoot at each other. The Bedlem Paintball Site located at Birkin in North Yorkshire, England, has been out of business for years. One of their "attractions" was ex-Royal Air Force de Havilland Vampire T.11 XE874 and the two-seat jet trainer is now slowly rotting away. Vandalized and stripped of some parts, the wood fuselage pod is completely rotten and most of the cockpit has been removed. The plane is probably well beyond restoration but perhaps some its parts can be utilized for other aircraft.



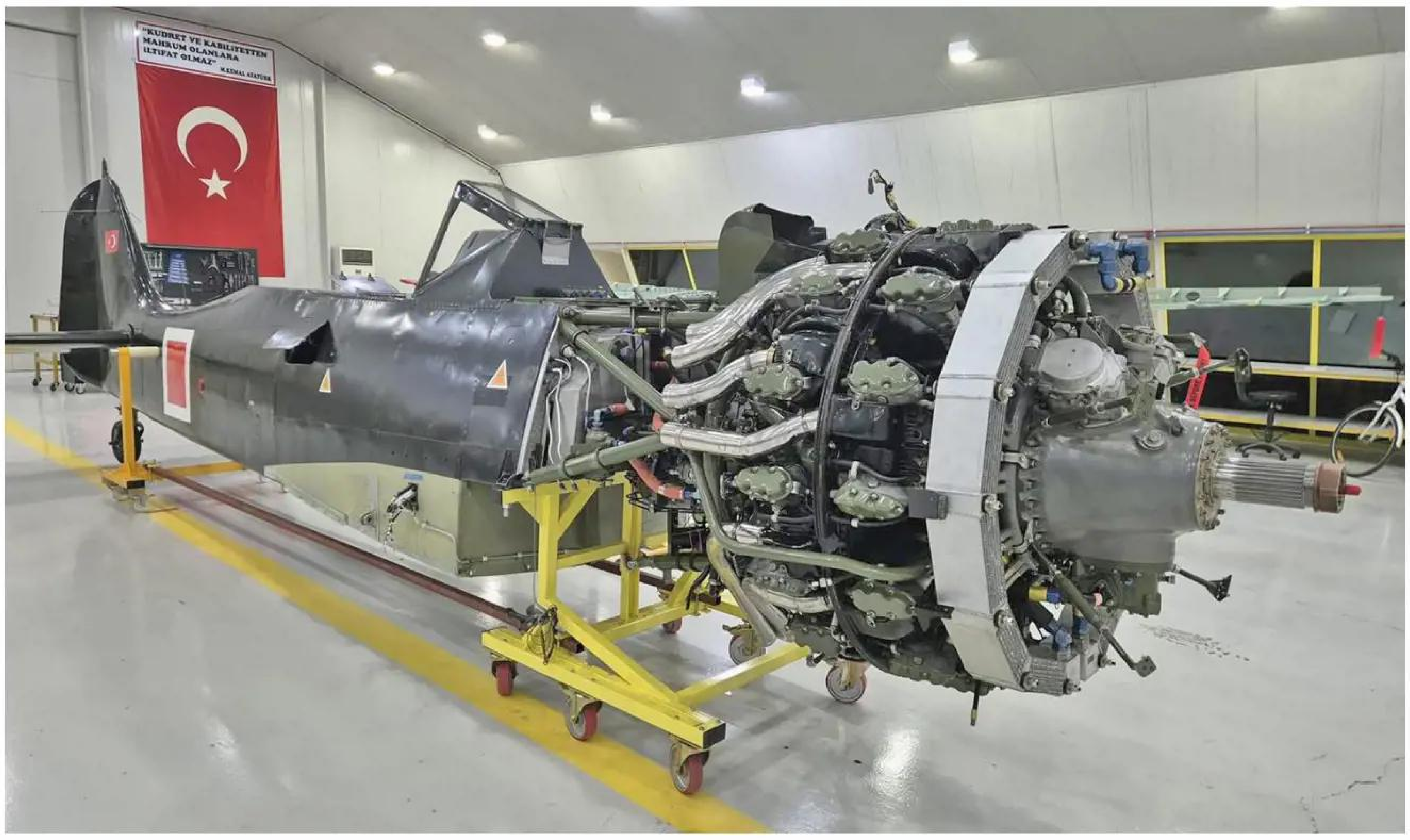
The cockpit of the T.11 is almost unrecognizable.



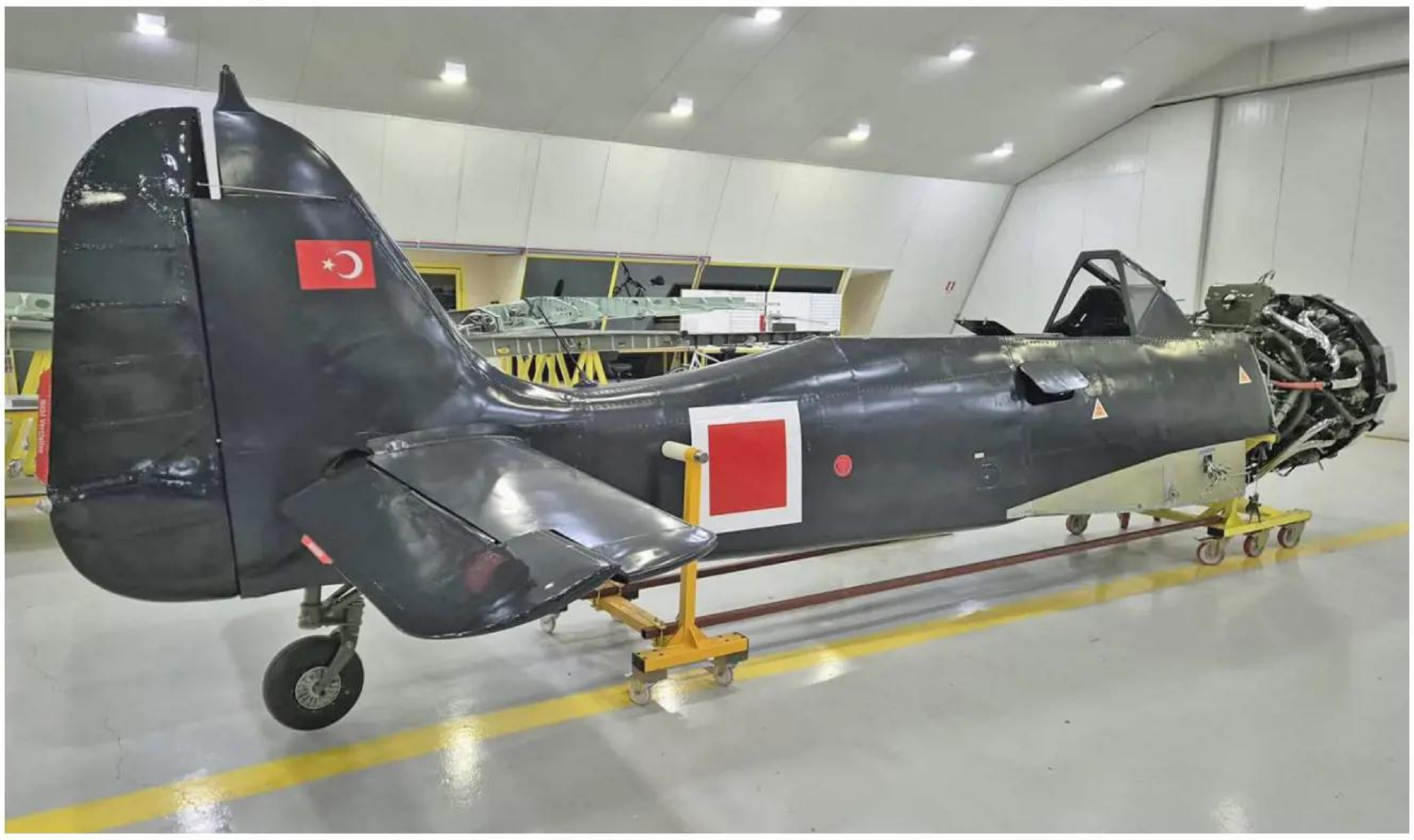
Focke-Wulf Fw 190A-3 in Turkish Air Force markings.

FLUG-WERK FW 190 IN TURKEY

After two accidents, Dan Kirkland has sold his Flug-Werk FW 190 replica (it should be noted that for the replicas, the "FW" is capitalized compared to the factory designation "Fw") to Turkey where it is being repaired and painted in Turkish Air Force markings. During WWII, the government of Turkey was playing both sides and getting aircraft from the Nazis and the Allies. In exchange for raw materials the Turks got 72 Fw 190A-3 fighters that they operated through 1947. At this time, a lack of engines and spare parts grounded the fleet. Over the years, there have been reports that these aircraft were buried in caves but that is doubtful. The Fw 190s operated in conjunction with Spitfires obtained from Britain, making for a very strange sight.



When the Turks received their Fw 190s, they were in standard *Luftwaffe* camouflage but over time the fighters were painted in this dark green color scheme.



With repair work done, it is intended to fly the replica FW 190 in Turkey.

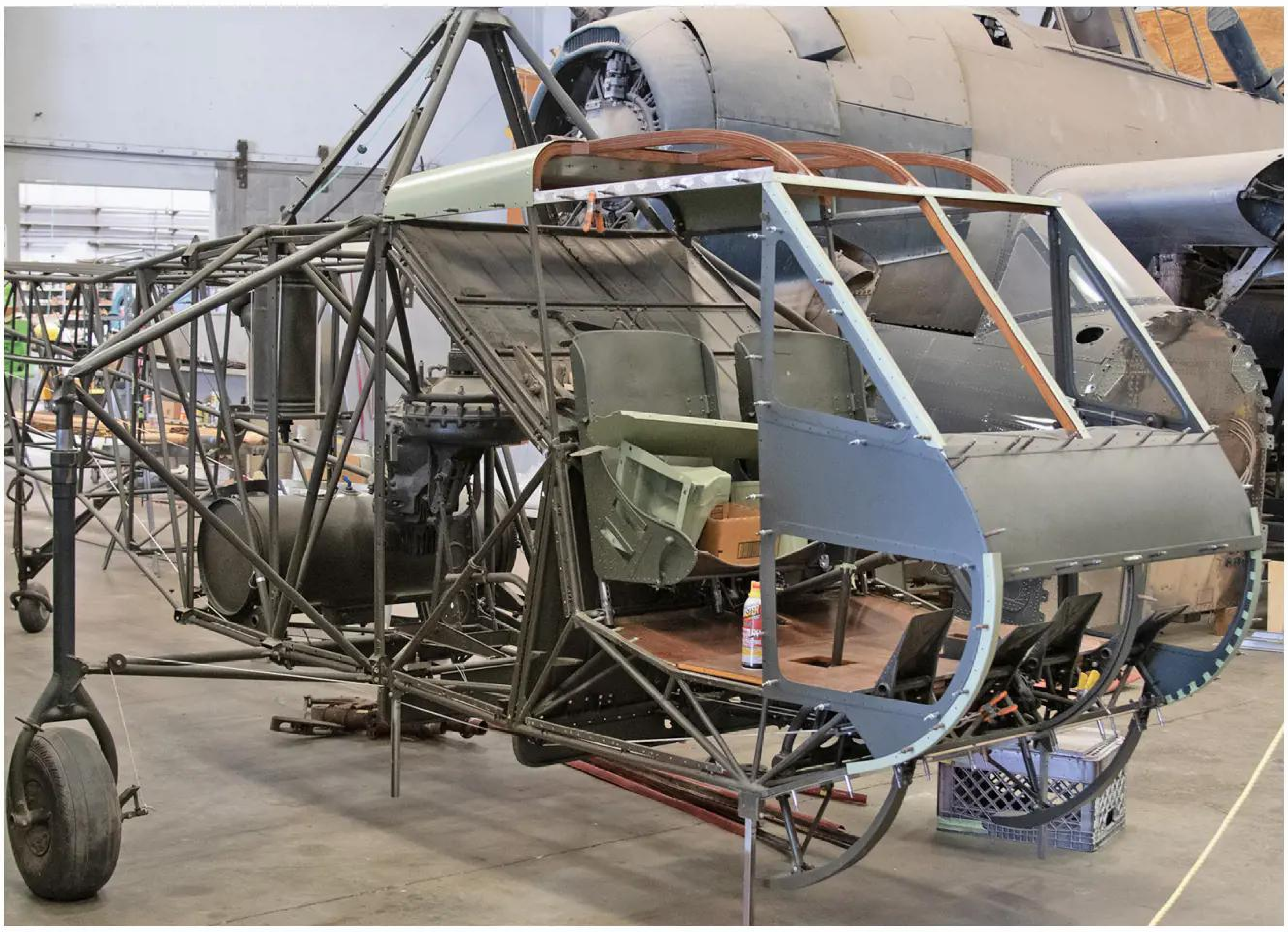
WORLD'S OLDEST AIRWORTHY HELICOPTER

At Yanks Air Museum in Chino, work is rapidly progressing on returning a rare Sikorsky R-4 to the air. When this takes place, it will be the world's oldest flying helicopter. First flown on 14 January 1942, the XR-4 would set the pattern for the production run and was an extremely efficient machine for its time. The USAAF would order 29 pre-production prototypes with the first three as YR-4As, the remainder being YR-4Bs. This led to the R-4B with 100 built and the Hoverfly Mk. I for the RAF, RN, and RCAF which would total 133 helicopters. The production aircraft were quickly dispersed to combat zones around the world where they proved to be surprisingly effective. The type was also rapidly qualified for shipboard operations and opened up a new type of aviation for the Navy and other services.

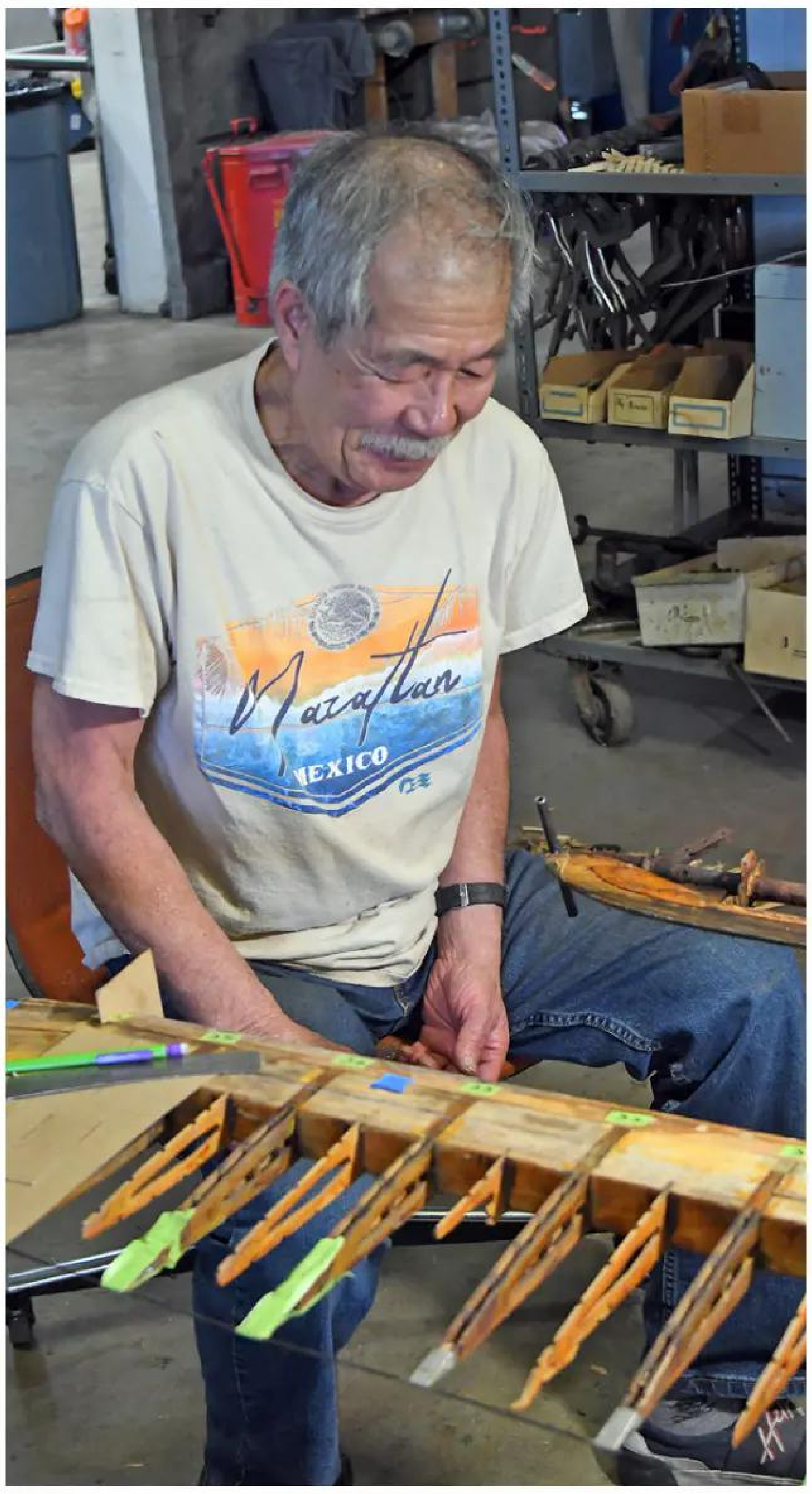
The R-4B at Yanks has been in storage for a number of years but it was recently moved into the restoration shop where work began under the supervision of master restorer Tony Furukawa. The engine has been sent out for overhaul and Tony was busily working on the cabin and forward fuselage and that is when somewhat of a snag took place. The rotor blades were removed from their containers and these are curious affairs that gave Sikorsky and the military headaches. The rotors are built from wooden ribs (each one of a different size!) that are attached to a steel spar. The leading edges are covered in thin wood. Then the whole unit was fabric covered.

In service, the blades were difficult to keep rotating in the same plane and they also could offer excessive vibration. There was no governor to control rotor speed and this had to be done by the pilot making continuous throttle movements to coordinate with pitch inputs. When Tony peeled the fabric back, he was dismayed to find that many of the ribs were cracked and broken. The helicopter had probably been operated in that condition until it was retired.

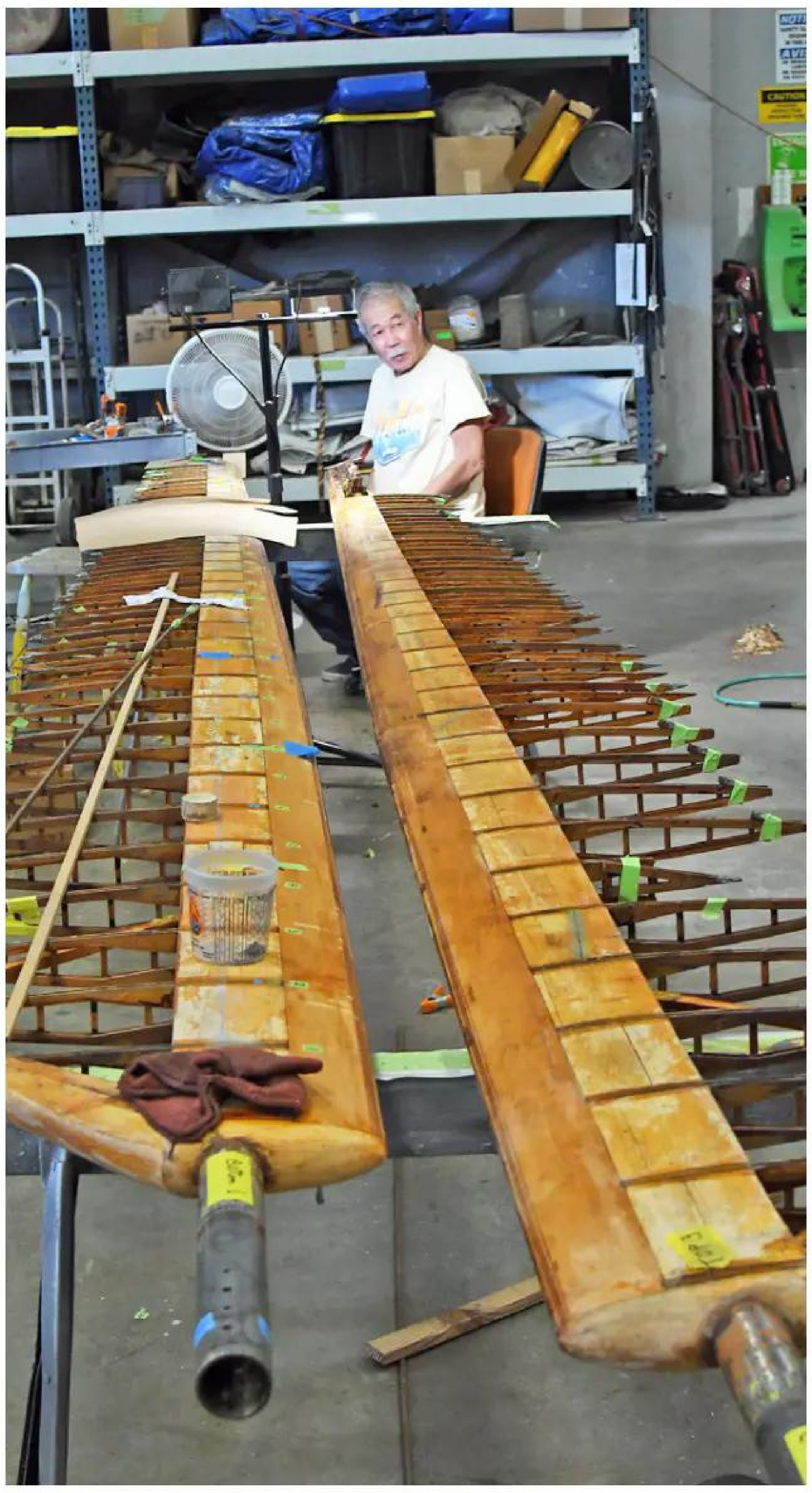
As can be seen, the blades have been laid out on a long table and Tony is laboriously going through each of the three rotors to replace and repair damaged blades. Once that is done, the blades will be recovered. The goal is to complete the fuselage before the engine returns from overhaul and then the rotors will be installed in the head and the helicopter extensively tested on the ground before a first flight.



Work has rapidly progressed at Yanks on the fuselage of the Sikorsky R-4.



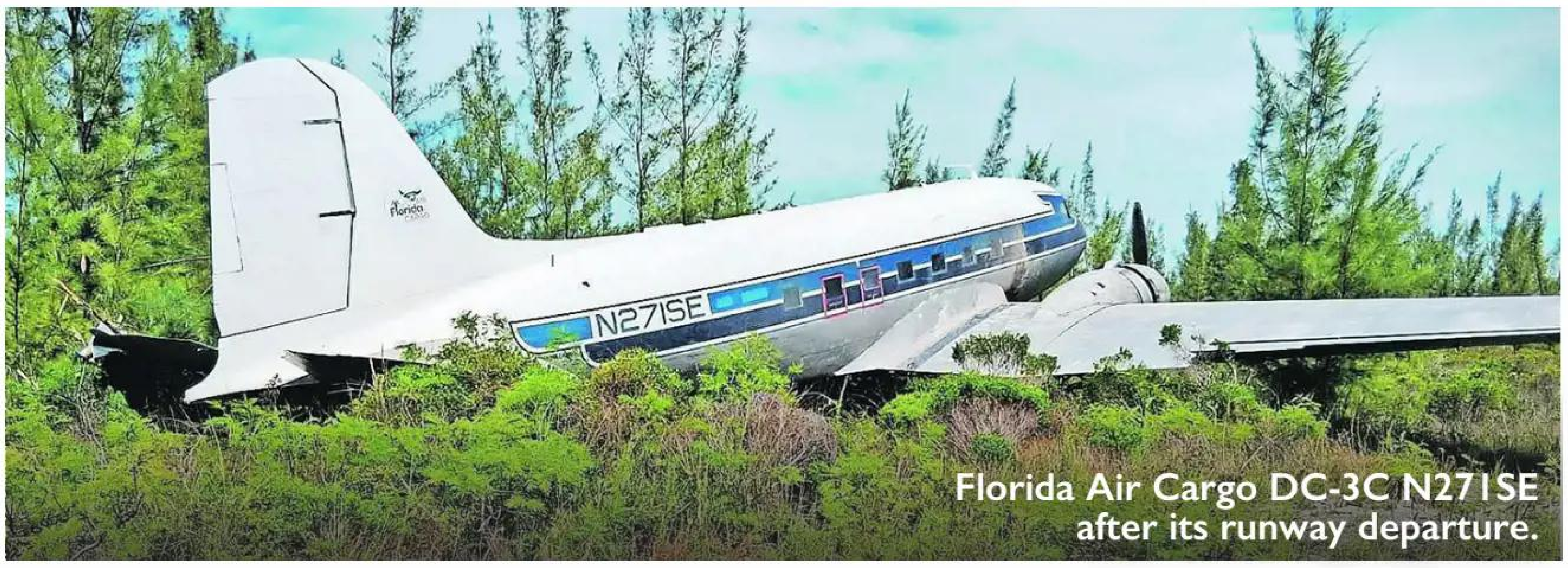
Tony examining and marking the damaged ribs. Each rib is of a different size, which makes work difficult.



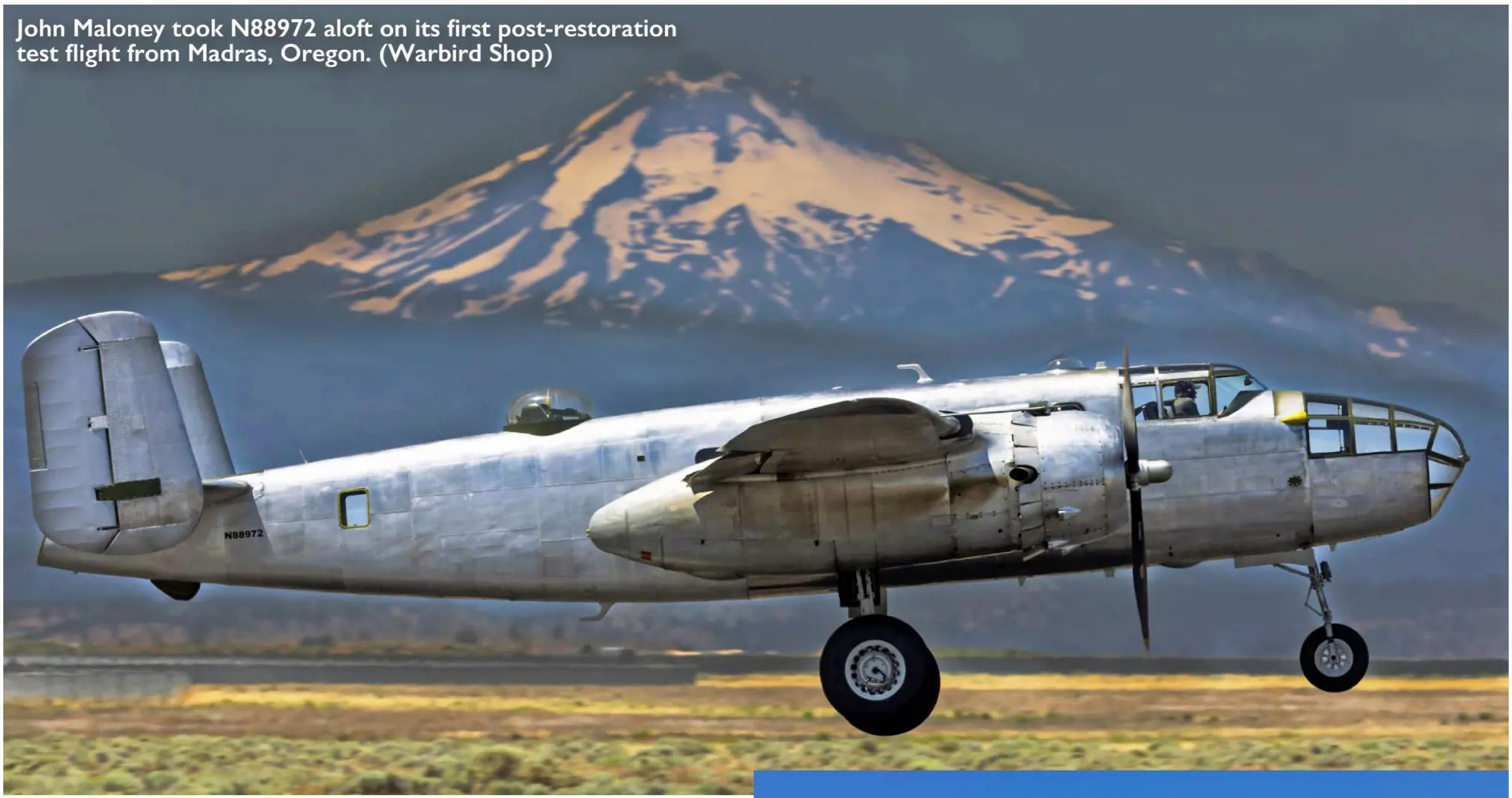
Rotor blades laid out for restoration. A daunting task when one notices the number of ribs.

FLORIDA AIR CARGO GOONEY OFF RUNWAY

On 15 September, DC-3C N271SE went off the runway at West End Airport in Grand Bahama. The aircraft was taking off but apparently failed to achieve flying speed and went into bushes and trees at the end of the runway. The aircraft was reportedly carrying a load of lobster bound for Fort Lauderdale. Both pilots were uninjured and it appears that damage may be relatively minimal.



Florida Air Cargo DC-3C N271SE after its runway departure.


John Maloney took N88972 aloft on its first post-restoration test flight from Madras, Oregon. (Warbird Shop)

B-25D AIRBORNE AGAIN

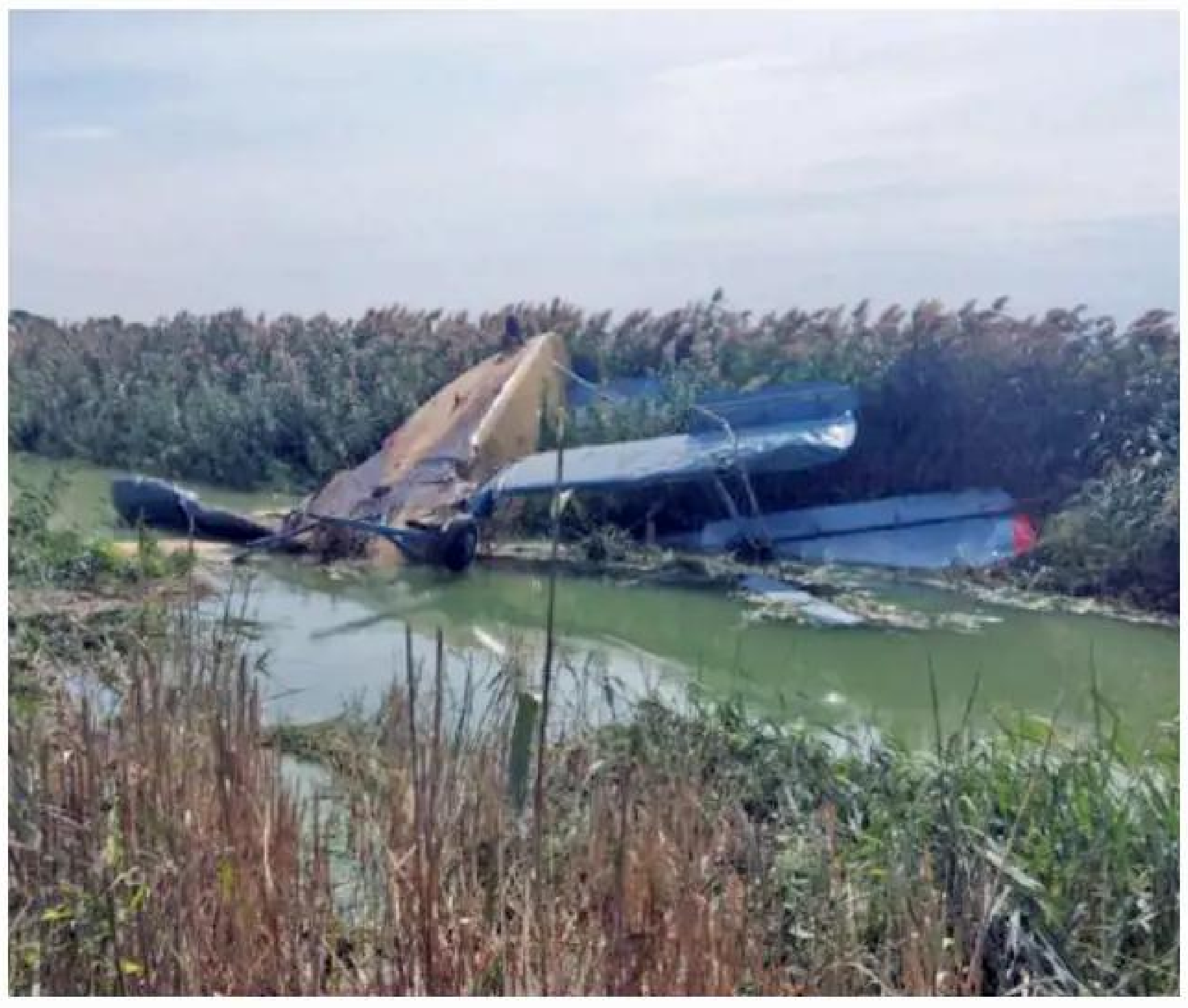
After a lengthy restoration by the Warbird Shop in Madras, Oregon where a crew of 16 worked for 18 months under the direction of Jim Martinelli (and this included reskinning about 85% of the airframe), the rare B-25D USAAF 43-3318 arrived at the paint shop at Santa Maria, California, where it will be painted as a B-25B of the Doolittle Raiders. This aircraft was originally delivered to the RAF as KL161 but was not taken up and was switched to the RCAF. The aircraft was retired in 1960 and sold a couple years later as CF-OGQ. The plane was to be converted to a fire-bomber but this did not happen. It eventually went south to become N88972. In 1967, the aircraft had a tank installed that could be used for river sanding or for fire-bombing but it is unclear if it was ever used for such. In 1980, the aircraft was saved by Merrill Wien and made flyable. In 1987 it was acquired by The Fighter Collection and after extensive work at Aero Trader the plane was flown across the Atlantic to become G-BYDR and to be painted in an RAF scheme. In 2002, it was sold to Paul Allen and flown to nearby North Weald where it sat in a hangar for the next four years. It was then flown back to Duxford and prepared for a transatlantic flight for new owner John Sessions. It arrived at Paine Field, Everett, Washington, on 1 November 2009. After legal problems, the plane was seized and sold to a foreign individual who then contracted with the Warbird Shop to do the restoration work. It is now once again registered N88972.

SANTA MARIA PUBLIC AIRPORT
The Mitchell after arriving at Santa Maria for painting. (Warbird Shop)

NORTHROP
P-61B
BLACK WIDOW

There are only four P-61 'Black Widow' night fighters in existence, worldwide. All but one of these survivors are on static display never to fly again. **Help us restore the fourth 'Black Widow' and get her in the air.**

Purchase the P-61 PlaneTag from our website **(www.maam.org)** or call us at **(610) 372-7333**. **Proceeds support our P-61 restoration.**
MotoArt
OWN A PIECE OF HISTORY
NORTHROP
P-61B
BLACK WIDOW
PLANETAGS
NORTHROP
P-61B
BLACK WIDOW
GENUINE SKIN
SN #: 42-39445
#0105 OF 3,200
GENUINE SKIN LIMITED EDITION
MID-ATLANTIC AIR MUSEUM


Colt RA-33675 after its crash while on a spraying mission.

ANTONOV OF THE MONTH

On 9 September, Antonov An-2R RA-33675 operated by Kjimavia Ltd. crashed near Morozov, Rostov Oblast, Russia. The plane was on an agricultural spraying mission and the pilot was killed. A passenger onboard was injured and, as can be seen, the Colt was destroyed.

YANKS
AIR MUSEUM

Bell P-63
Kingcobra

FROM CATS TO COBRAS!
YANKS AIR MUSEUM HAS IT ALL

When visiting Yanks Air Museum, make sure you check out our collection of CATS — and, no, we do not mean our pet “hangar cats” that are always on the prowl!

We mean the Wildcat, Hellcat, Panther, Cougar, Tiger, and Tomcat that are restored and on display. This is one of the largest collections of Grumman Cats anywhere in the world.

When it comes to COBRAS, we have the ultra-rare Airacobra, Kingcobra, and Huey Cobra along with dozens of other beautifully restored aircraft.

Grumman F6F-3 Hellcat

Grumman F-14 Tomcat

MAKE SURE TO VISIT OUR RESTORATION FACILITY AND TOUR OUR AMAZING “BONEYARD” OF FUTURE RESTORATION PROJECTS

Bell P-39 Airacobra

Check out our great wedding venue!

Have your next event at Yanks!

Grumman
F4F Wildcat

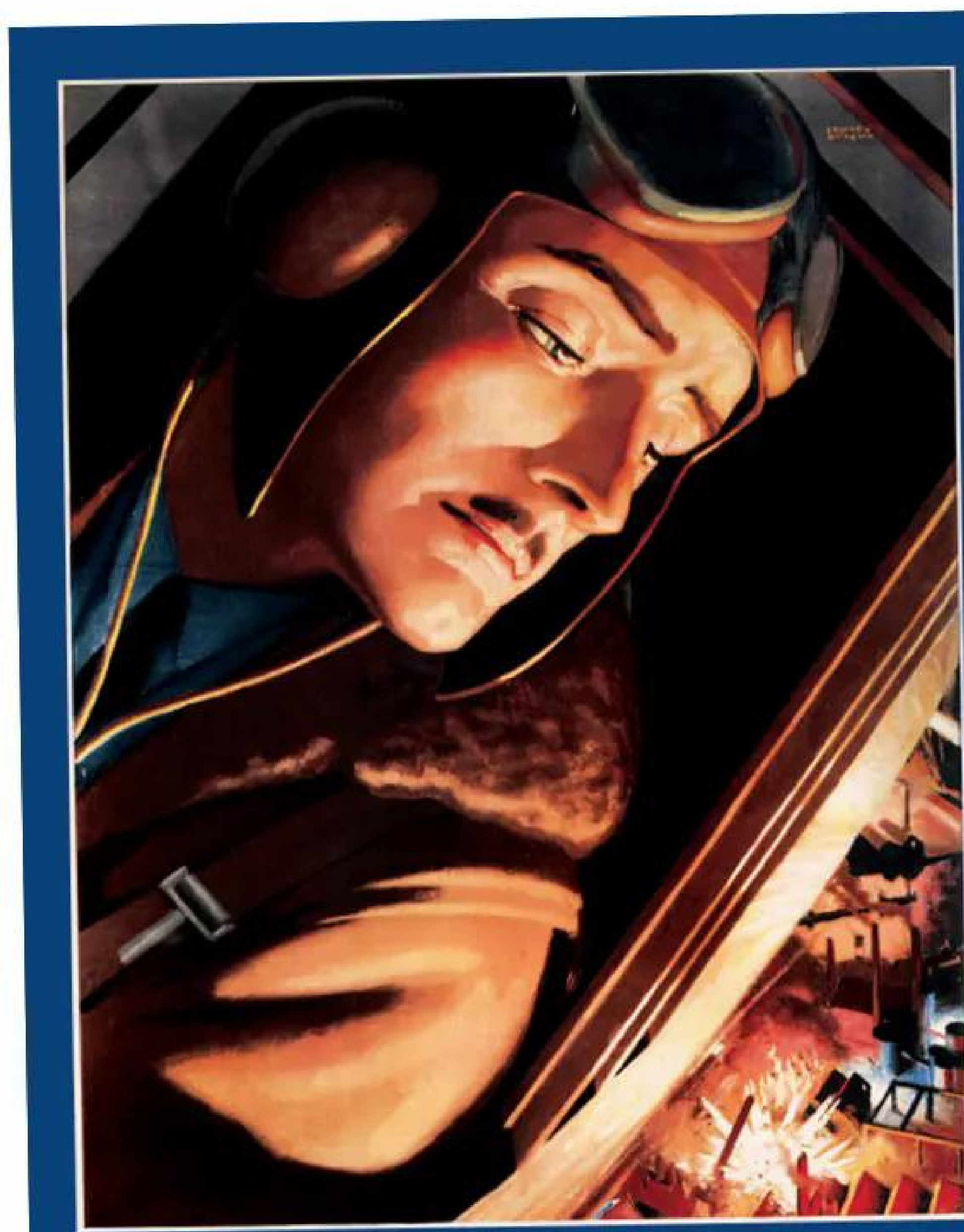
WHERE THE LEGENDS FLY ON!

YANKS AIR MUSEUM AT HISTORIC CHINO AIRPORT
15121 Stearman Drive, Chino, California 91710

Tuesday through Saturday 10:00 am-4:00 pm, closed Sunday, Mondays and Major Holidays

909-597-1735
www.YanksAir.org

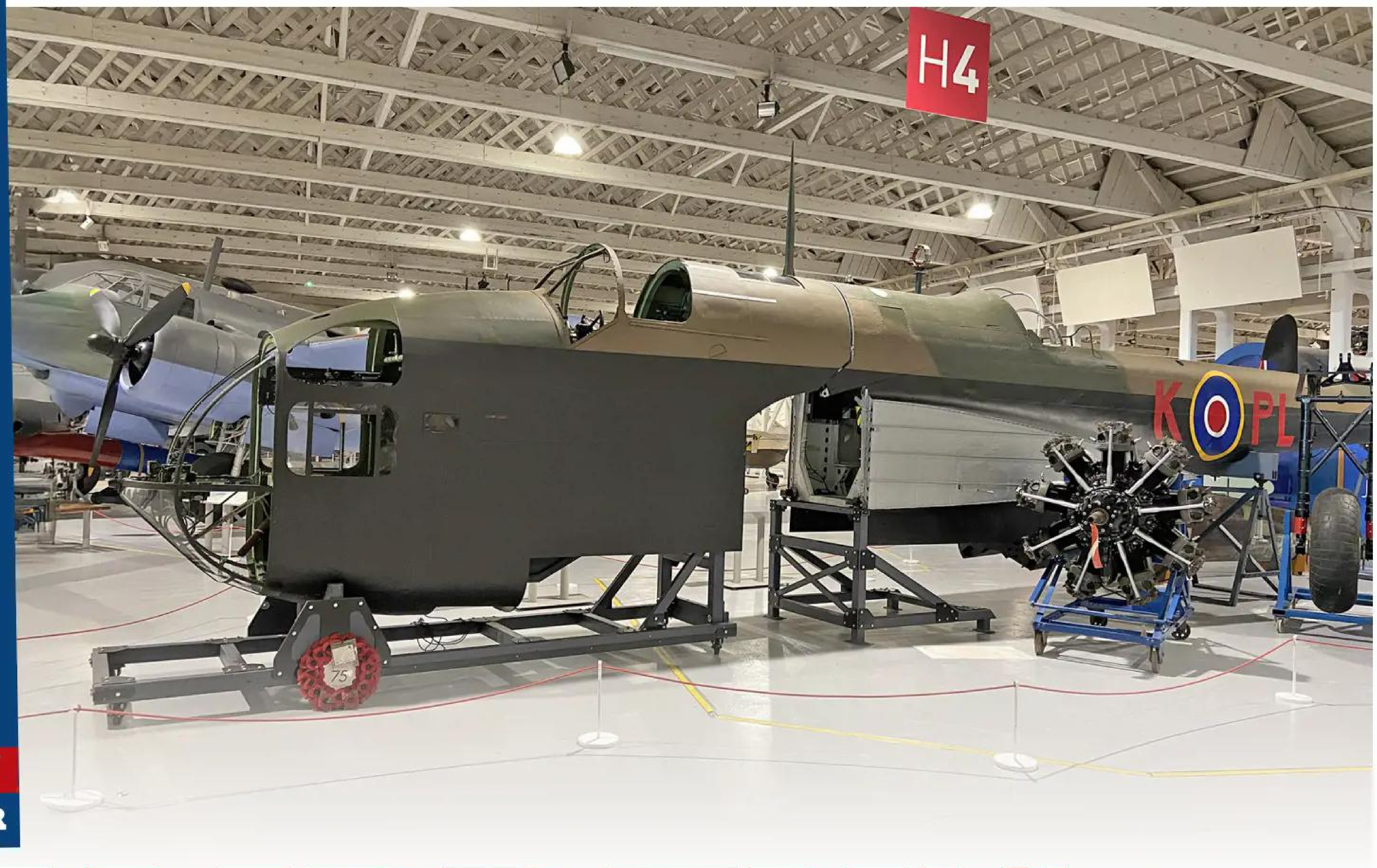
Lockheed 12 photo by
Michael Malak Photography



WARBIRD & CLASSIC REPORT

KEEP 'EM FLYING!

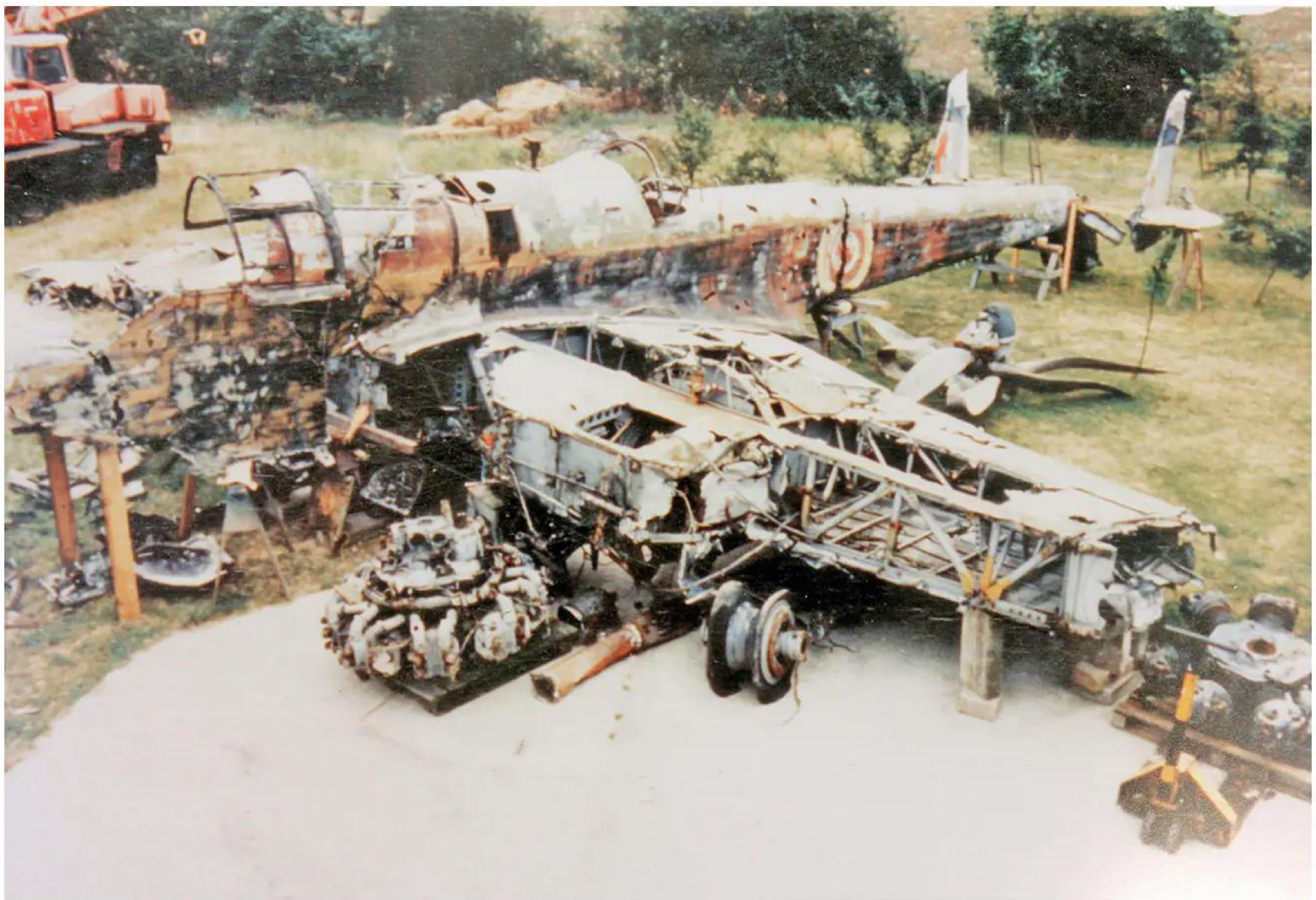
COMPILED BY DOUG FISHER



HAMPDEN'S RETURN

THE ROYAL AIR FORCE MUSEUM HAS COMPLETED RESTORATION OF THE FUSELAGE OF A HANDLEY PAGE HAMPDEN. WE EXAMINE THE TYPE AND THE SURVIVORS

BY ERIC JANSSONNE



This is what the Hampden looked like when the wreck was laid out for inspection by the RAF. P1344 had run into icing conditions and was not able to hold altitude. The pilot elected to descend into the mountains while the navigator worked his way into the nose in order to help guide him.

When the Royal Air Force went to war with the *Luftwaffe* in September 1939, the service was equipped with a poor selection of bombing aircraft and one of the worst was the Handley Page Hampden. Give the nickname of "the flying suitcase" by C.G. Grey, the caustic editor of *The Aeroplane* magazine, because of the shape and narrowness of its fuselage, the prototype, serial K4240, made its first flight on 21 June 1936. It was not until late 1938 that mass production plans for the type were put into operation and the bomber would be built by the parent company and by license-holder English Electric (770 examples built).

The original concept for the Hampden would be as a "fighting bomber" — an aircraft that could have the performance and armament to tackle enemy fighters. In this respect, the RAF was very wrong. The aircraft was poorly armed with one fixed forward firing .303-caliber Browning machine gun, a flexible manually-operated .303-caliber Vickers K gun in the bombardier's position, and two more K guns in rear upper and lower positions.

TOP: The fuselage of Hampden P1344 was unveiled in the Bomber Command Hall of the RAF Museum at Hendon on 30 June with a Bristol Pegasus alongside. Besides this and the Canadian example, it should be noted that the Wings Aviation Museum in the UK has the wings and tail of an aircraft with the provisional identity of "P1273." Also in the UK, the Lincolnshire Aviation Heritage Center has the remains of AE436, which they note is being restored to static condition. Both were No. 144 Squadron aircraft and "P1273" was shot down by mistake by Soviet Hurricanes while AE436 crashed in Sweden.

Luftwaffe fighter pilots called these guns "paint scratchers."

Initially, RAF pilots were very pleased with the Hampden's speed and maneuverability but when the war started and the type was engaged by Messerschmitt Bf 109Es, it was a different story. It only took a couple of months before Bomber Command realized that the daylight hours were too dangerous for the Hampden and, instead, began operating them mainly at night. Numerous examples were assigned to Coastal Command, where the chance of running into German fighters was less but, even so, 714 Hampdens (out of a total of 1432 built) were lost during operational missions with 1077 airmen killed and another 739 listed as missing. Also, the type had some really dangerous flying qualities and the accident rate was high with 263 recorded as lost due to a "variety of causes."

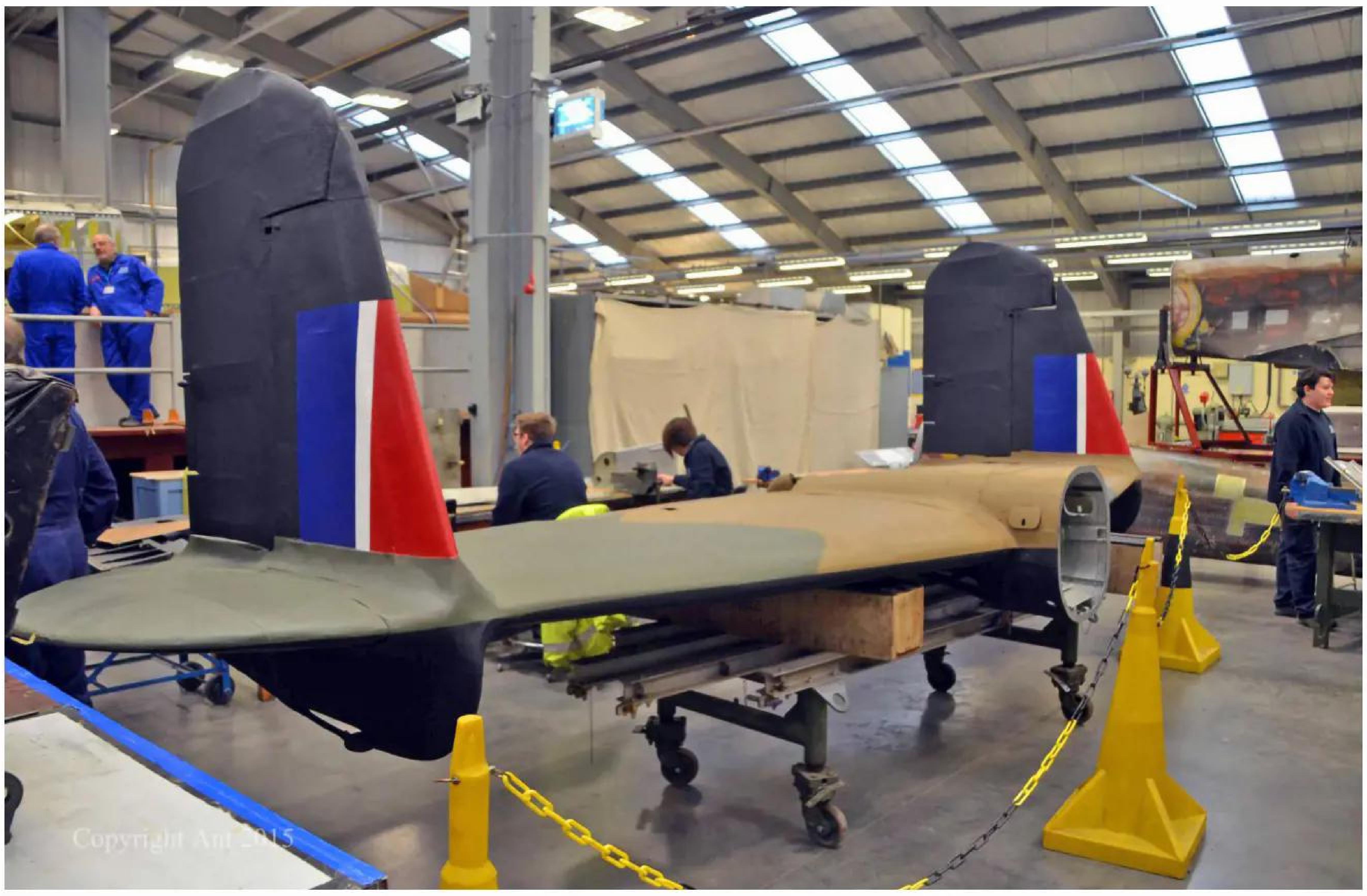
Still, the need for operational aircraft remained very high and Hampdens kept being flown and this included something called Operation *Orator* that took place in September 1942 when 32 Hampden TB Mk. I torpedo-bombers (the type had been modified to carry torpedoes) drawn from RAF No. 114 Squadron and RAAF No. 455 Squadron departed Scotland on a flight to northwest Russia. The planes were to protect vital cargo ships of Convoy *PQ-18* and other convoys from German surface ships, including the marauding *Tirpitz*. The route they flew was hazardous as well as long — some 2100 nautical miles. Some of this route took the aircraft near German-occupied territory in Norway and Finland. Eight Hampdens were lost *en route* to Vaenga in Murmansk Oblast, Russia. Only a few ineffective sorties were flown against the Germans and, in the end, the Hampdens were left with the Russians.

The Hampdens were finally withdrawn from all RAF combat operations and some were utilized in the training role but most were parked and scrapped. Even though it was a failure, the Hampden crews performed heroically under the most difficult of circumstances and the absence of a Hampden in the RAF Museum at Hendon left a notable "hole" in preserved RAF early WWII aircraft.

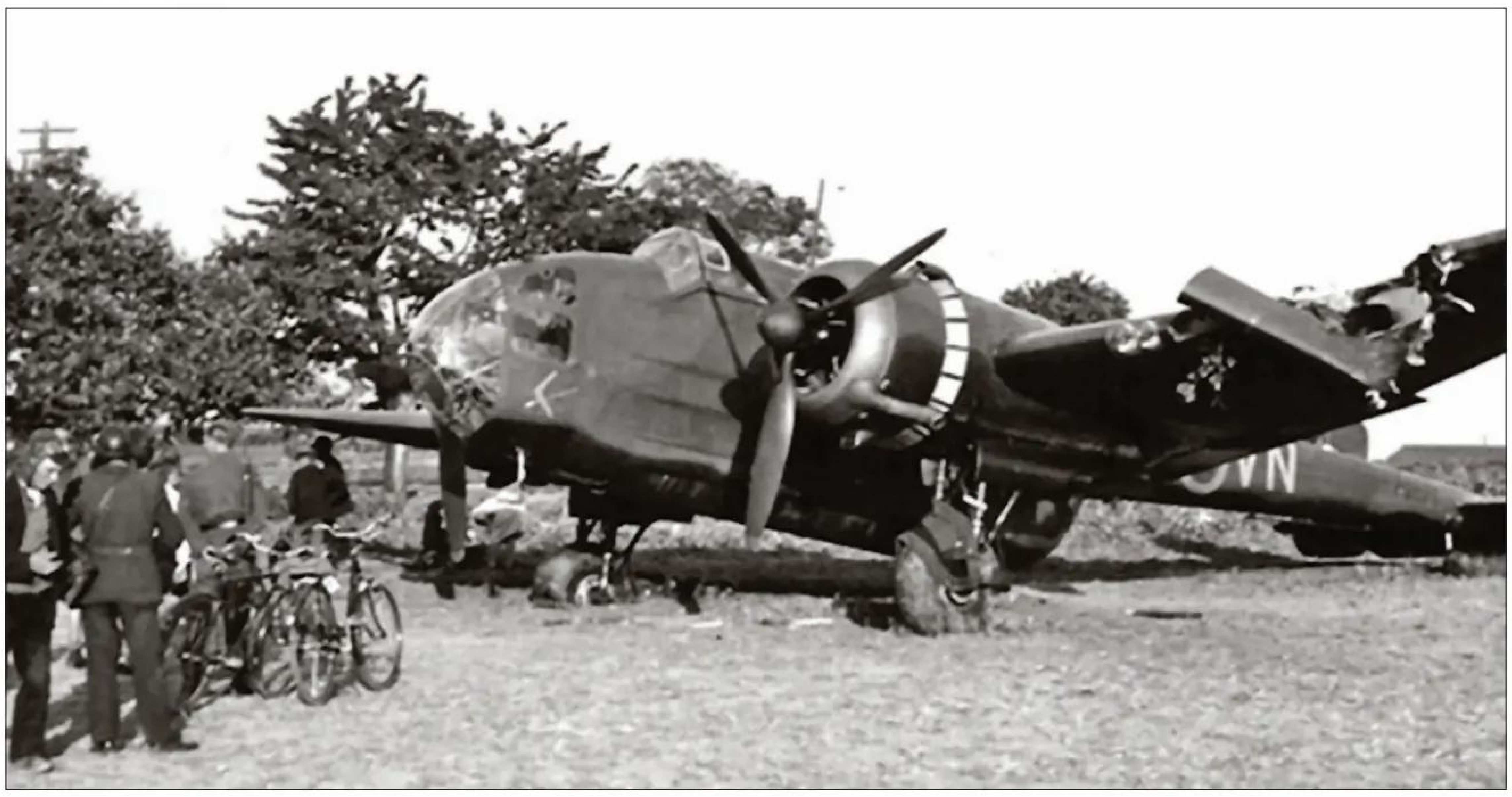
The late 1980s and early 1990s saw a new form of Russian capitalist. With the collapse of communism and the need to make a living, numerous groups were scouring remote former battle sites with the hope of finding downed WWII aircraft, tanks, and other artifacts that could be sold for a profit to those crazy Westerners that wanted such things.

One such group found the remains of Hampden Mk. I P1344 that had served with RAF No. 144 Squadron as part of Coastal Command. P1344 was one of the aircraft transferred to northern Russia to help protect the Arctic convoys. While in transit over Finland, the pilot made the mistake of flying near a *Luftwaffe* airfield and two Bf 109Gs took off to give

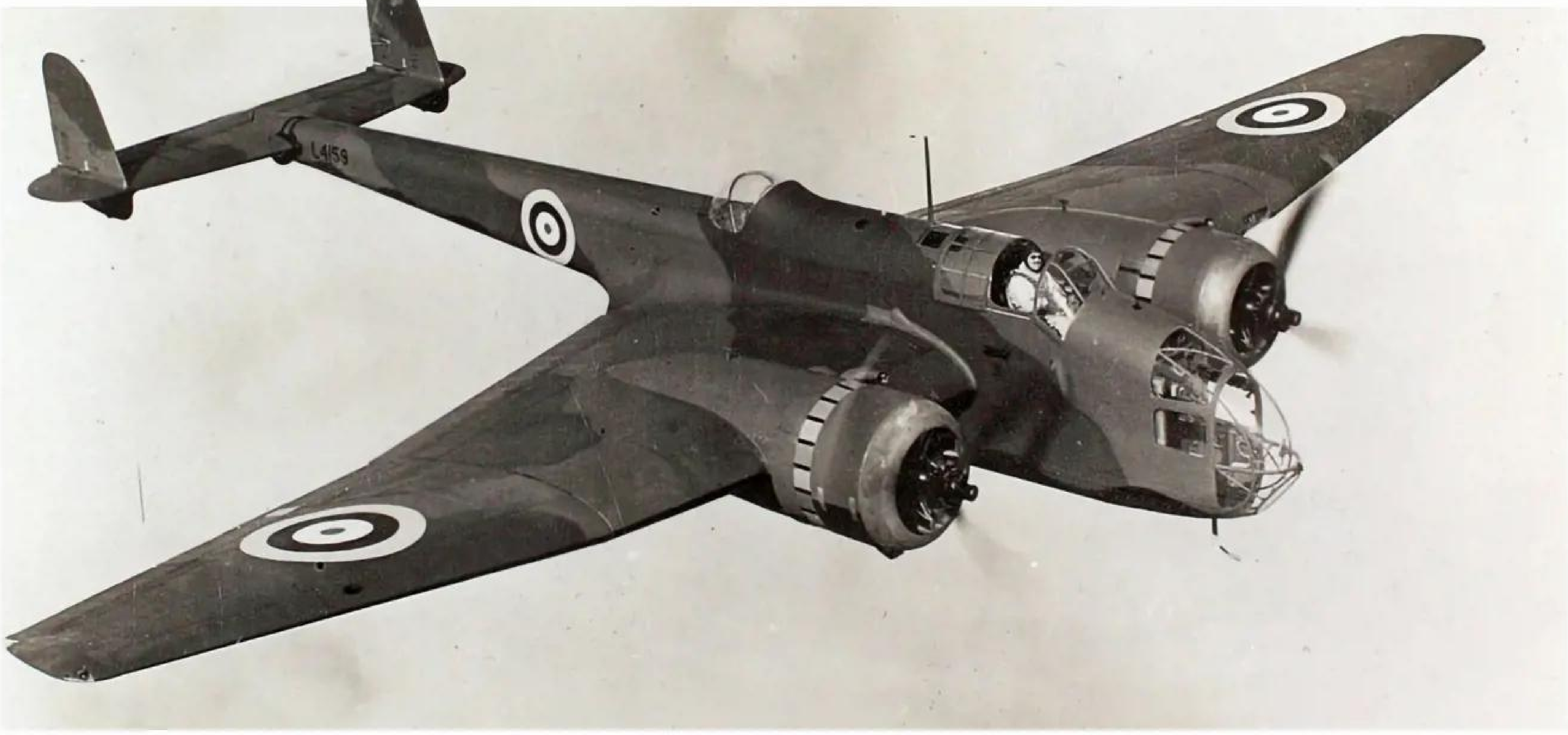
The Hampden departs RAF Museum Midlands on its way to Hendon.



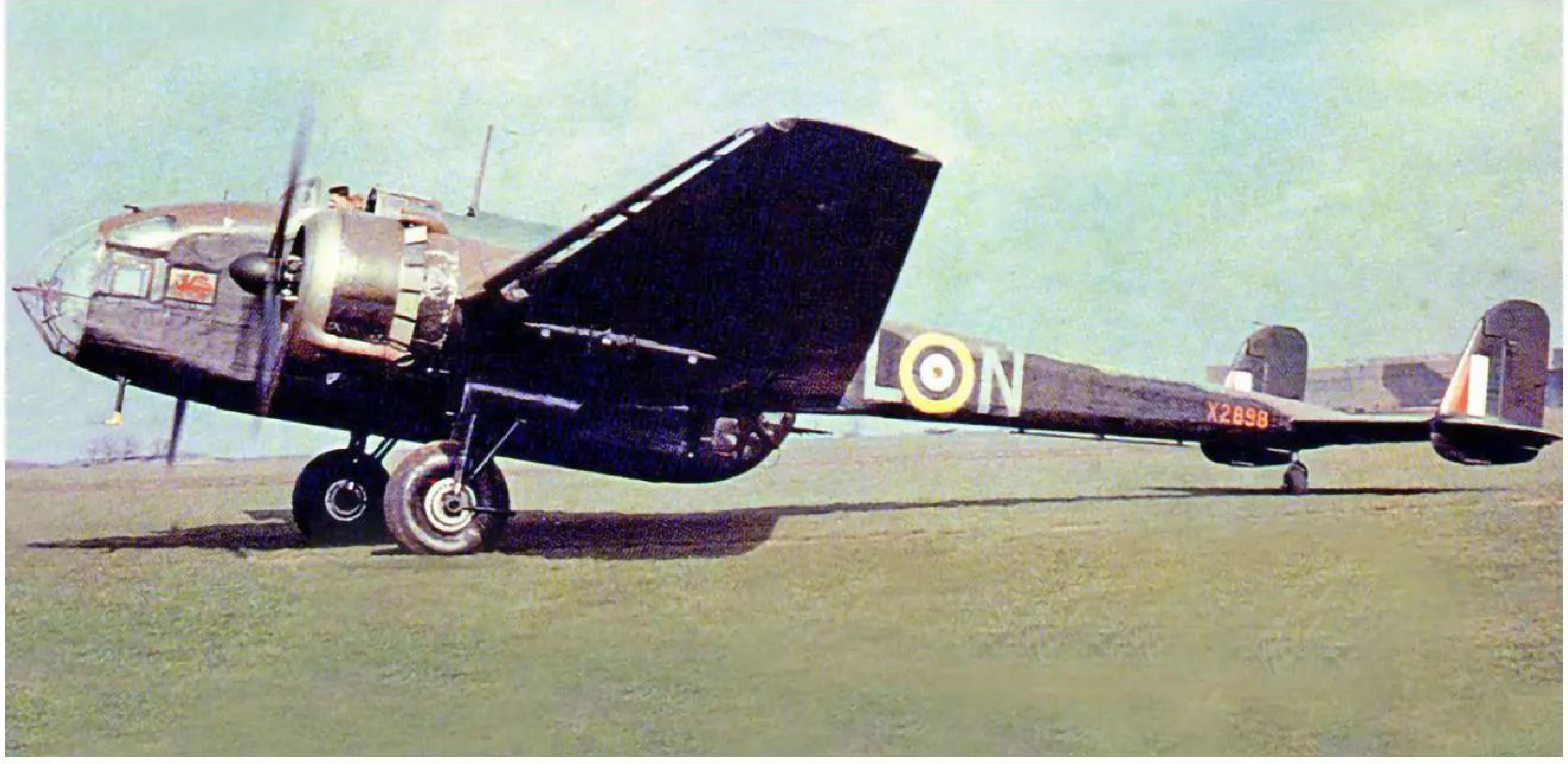
The restored tail section. It was decided to leave the bullet holes that downed the plane in the structure.



On the night of 25/26 August 1940, the RAF took its first trip to Berlin. For the mission to "Big B," 46 Hampdens from Nos. 49, 50, 61, and 144 Squadrons participated. Six Hampdens were lost during that raid. This is P2070 VN*X from No. 50 Squadron. It had dropped its bombs on Berlin but then may have run into fuel problems and came down near Lautersheim, Germany. The heavy damage to the left wing was probably caused by striking something during the nocturnal landing. Australian Pilot Officer Robert D. Wawn and his crew were captured and spent the war in various POW camps.



The last Hampden raid on "Big B" took place on 21 September 1941. Over a period of 13 months, some 20 Hampden raids were undertaken and these averaged 26 aircraft per raid. The largest concentration involved 50 aircraft and the smallest ten. During this period, 34 Hampdens were lost, of which 23 (58%) were due to fuel shortage. Seven were listed as lost to enemy action. No. 50 Squadron lost nine aircraft, of which seven ran out of fuel, one was shot down, and one made a forced landing because of engine problems. For the Berlin trip, the Hampden's bomb load was four 500-lb bombs and some incendiaries. The endurance with this load was a bit over ten hours.



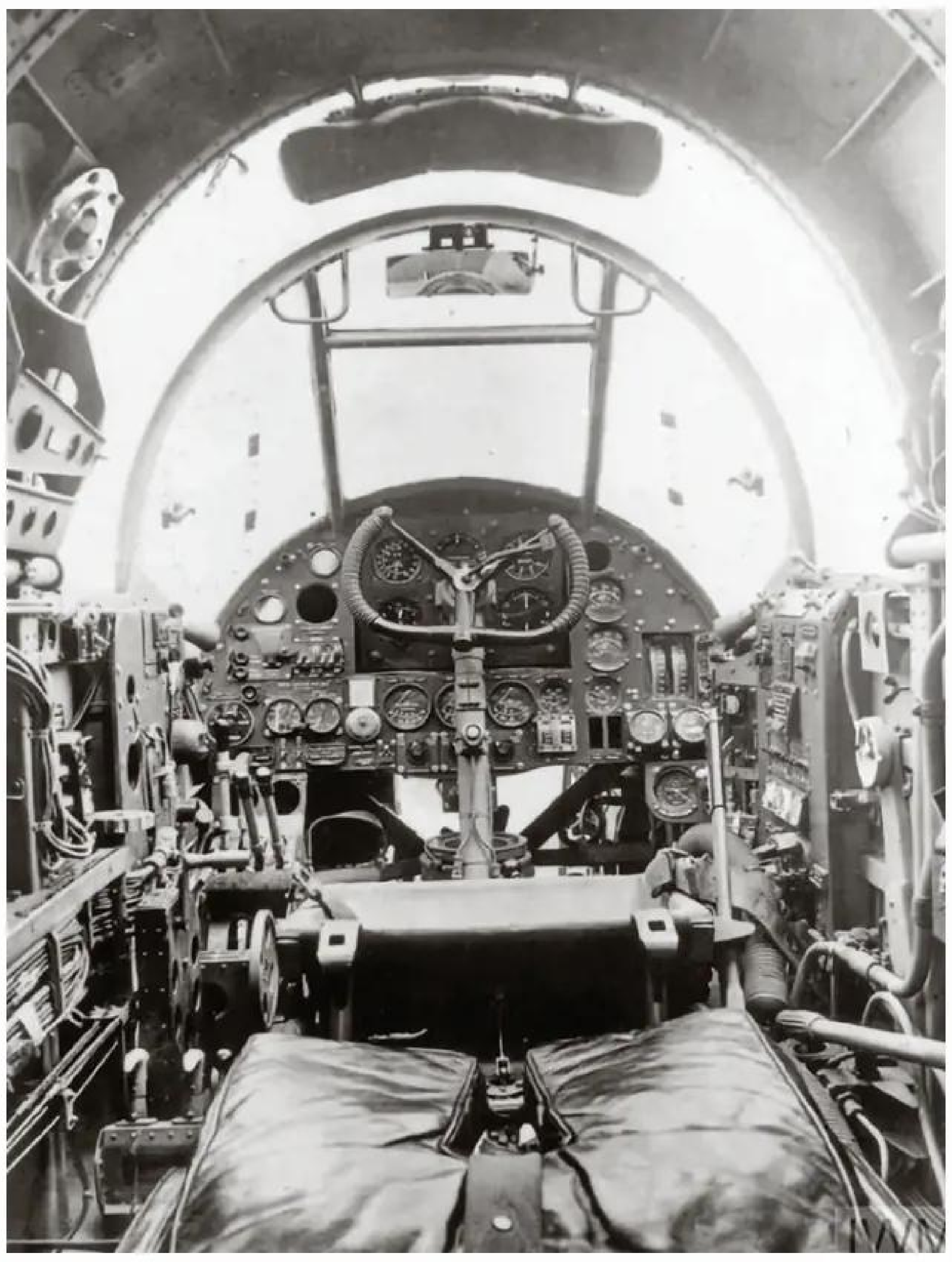
Hampden K2898 prepares to takeoff. This view shows the inadequate .303-caliber gun in the bottom of the fuselage.

chase. The Hampden really had no chance and the Germans raked "the flying suitcase" with cannon and machine gun fire. The Hampden crashed into a heavily-wooded area of the Kola Peninsula. Three of the crew died in the action and the two survivors were made POWs. The Hampden was left where it fell since the *Luftwaffe* had no interest in such obsolete types. Local Russians began going through the crash for items they could use and rubber from a tire was made into shoes.

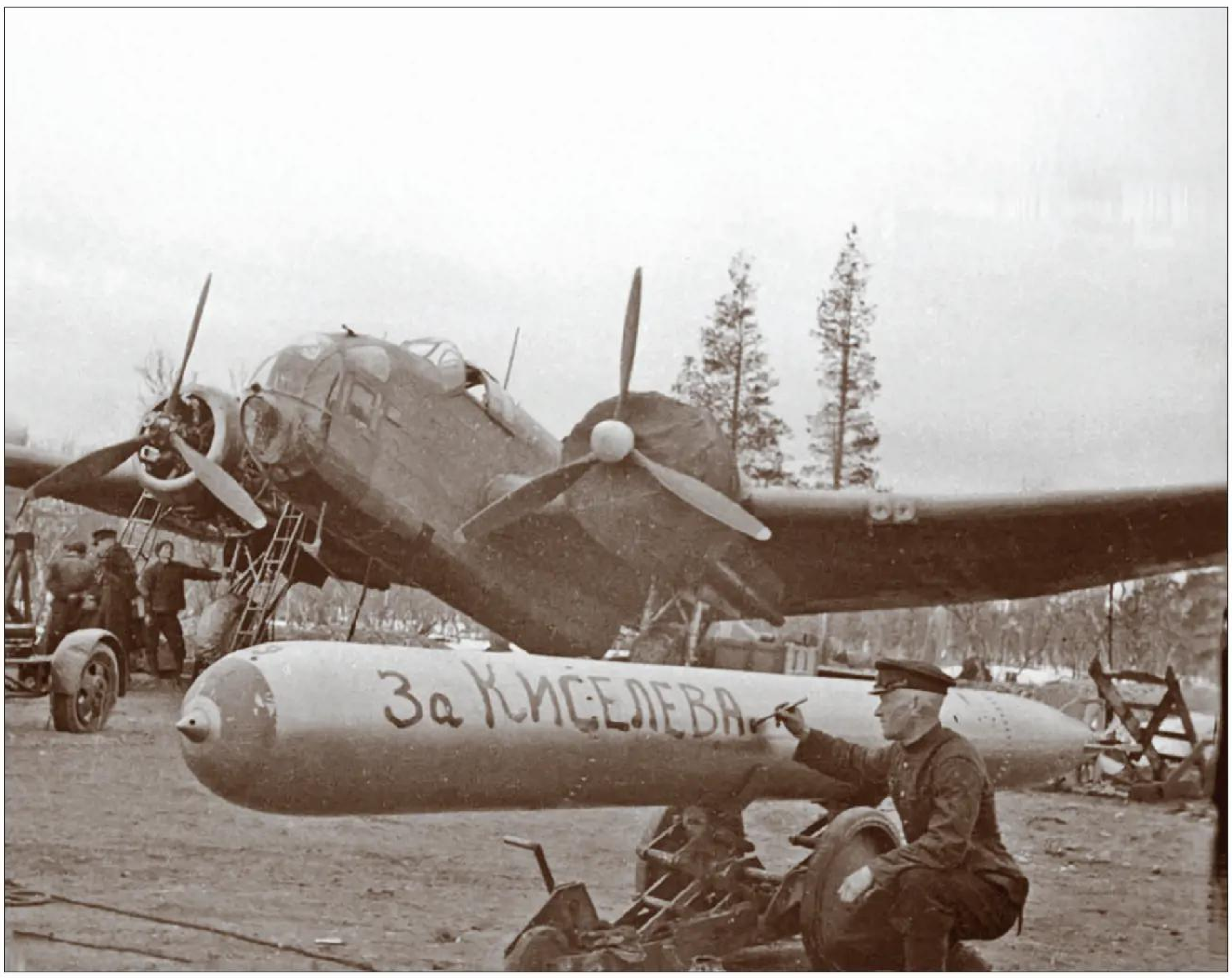
Learning of the wreck, the RAF Museum was able to purchase the remains which were then transferred to the Michael Beetham Conservation Center at the RAF Museum facility at Cosford. Over a span of three decades, work was undertaken in an attempt to restore the remains as a static example of the early war bomber. What was left of this particular Hampden was in better shape than the Canadian aircraft recovered from salt water.

With limited budget, work proceeded quite slowly but progress was steady and the fuselage received the priority. As a point of interest, as decades of grime and paint were removed, the restorers found the serial L6012 on the fuselage boom. This aircraft was one of the Hampdens powered by the Napier Dagger engine, another failure. So, one has to presume that P1344 must have been damaged at some point and the tail boom of L6012 was substituted. Even though the tail boom was relatively intact, the restorers decided to build a new unit but the original is now on display with the fuselage.

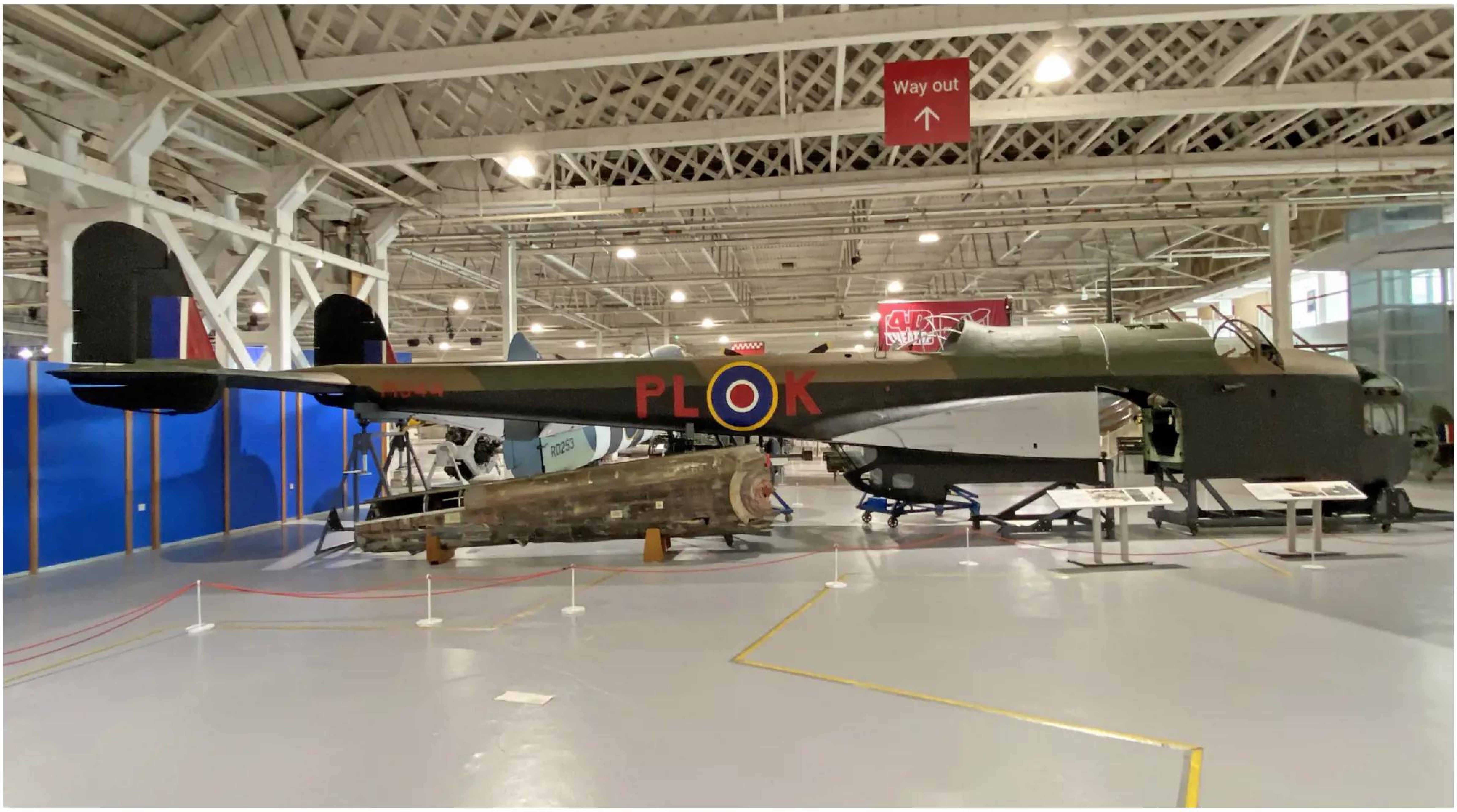
The restorers are quite honest about their project and state that the fuselage uses about 25% original structure. The rest has



Hampden cockpit measured only three feet across. As can be seen, access to the nose position was difficult. Wilfred John Lewis flew the type and commented, "There were 111 items for the pilot to take care of because on the original aircraft he had not only to find the instruments, the engines, and all that, but also he had all the bomb switches."



The Russians, with their fatalistic attitude, saw any aircraft as an opportunity to strike at the Germans. They gladly took the Hampdens the British left and carried out attacks against German shipping.



The original tail boom is displayed alongside the restoration.

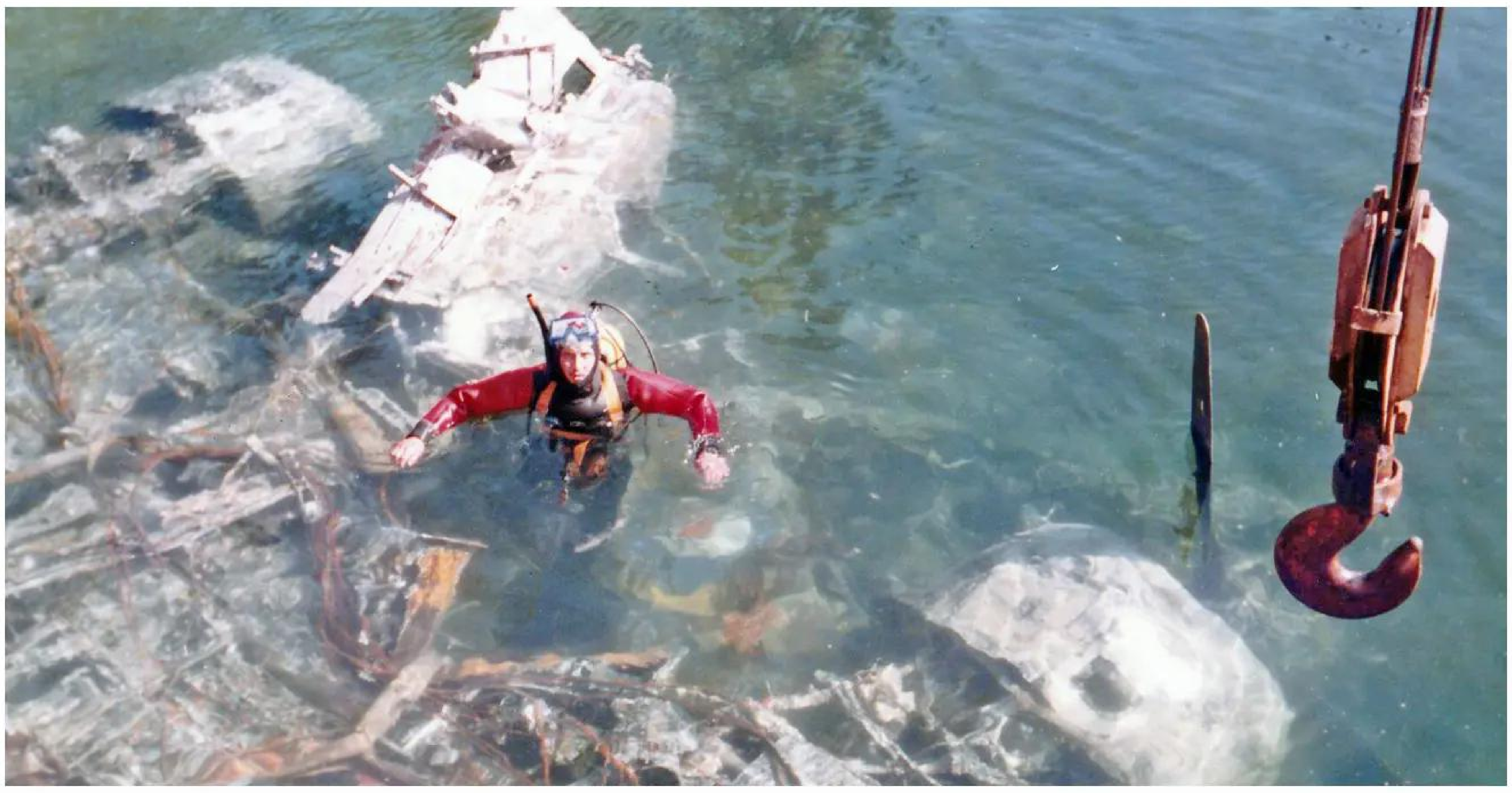
been fabricated by hand. The wings and other components are held in storage and, hopefully, will be restored sometime in the future. The RAF Museum does note that there is currently not enough room to display the Hampden with wings attached. The hard work to create a failed aircraft will stand as a testimonial to the brave crews that flew the Hampdens against a superior and overpowering enemy.

THE CANADIAN HAMPDENS

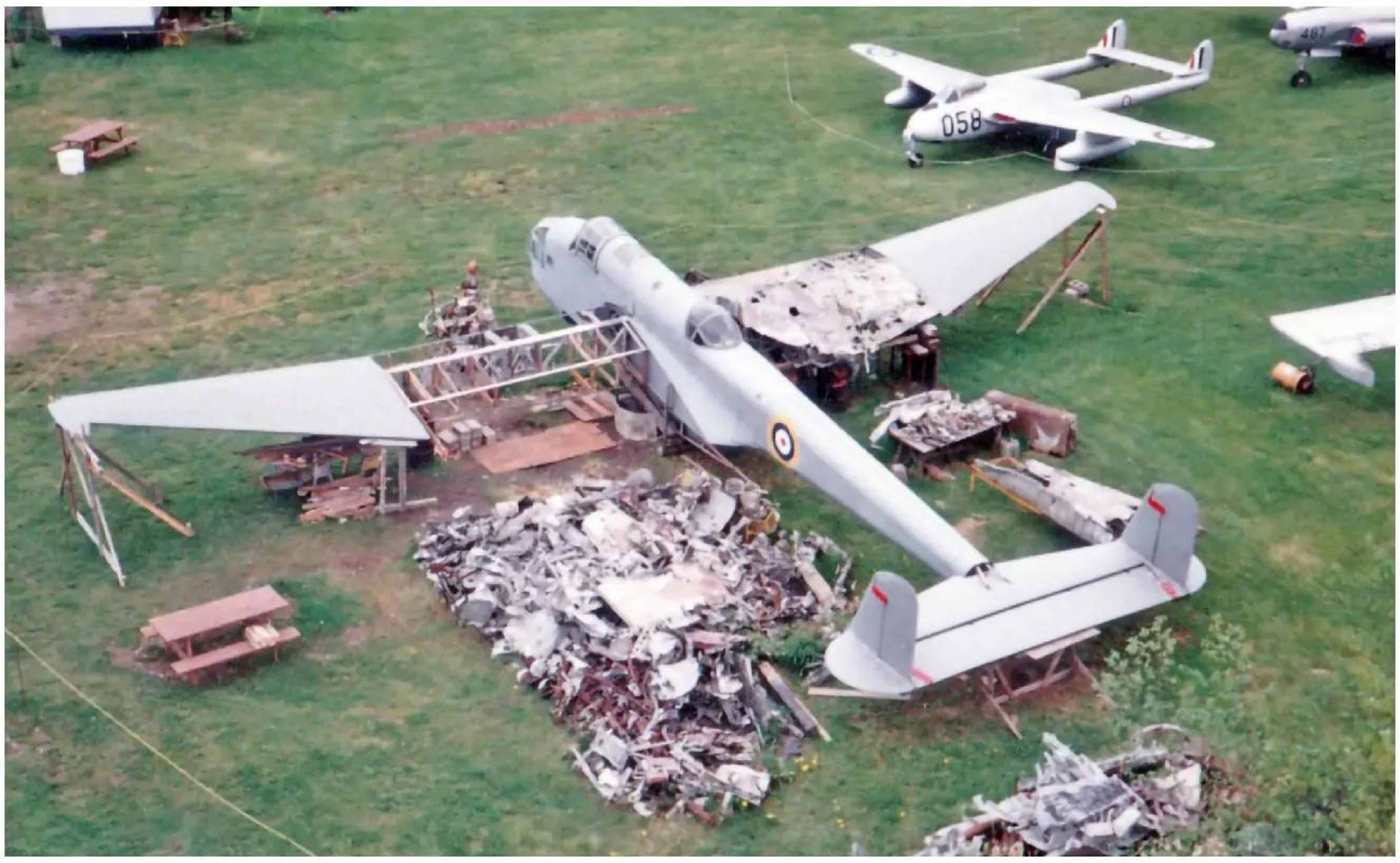
It is well-known that the Hampden was a disaster in combat. What is less well-known in the USA is that the type was built under license in Canada by Victory Aircraft. Although obsolete in the European war, the Hampden was the first mass-produced all-metal monoplane built in Canada and it was a great boost to getting Canadian warplane building up and running — something that would become vital as the war progressed.

Victory built 160 Hampdens and, somewhat surprisingly, out of this total 84 were shipped by sea to the UK and one would think the RAF had learned its lesson with the type. The remainder of the production order went to Patricia Bay (now Victoria Airport) in British Columbia where they were used to create No. 32 Operational Training Unit (OTU). A problem came up — many of the Hampdens were wrecked in accidents and strength of the unit dropped. This meant, again improbably, that 20 Hampdens, designated "war weary" by the RAF, were sent by ship to Canada to act as replacement airframes!

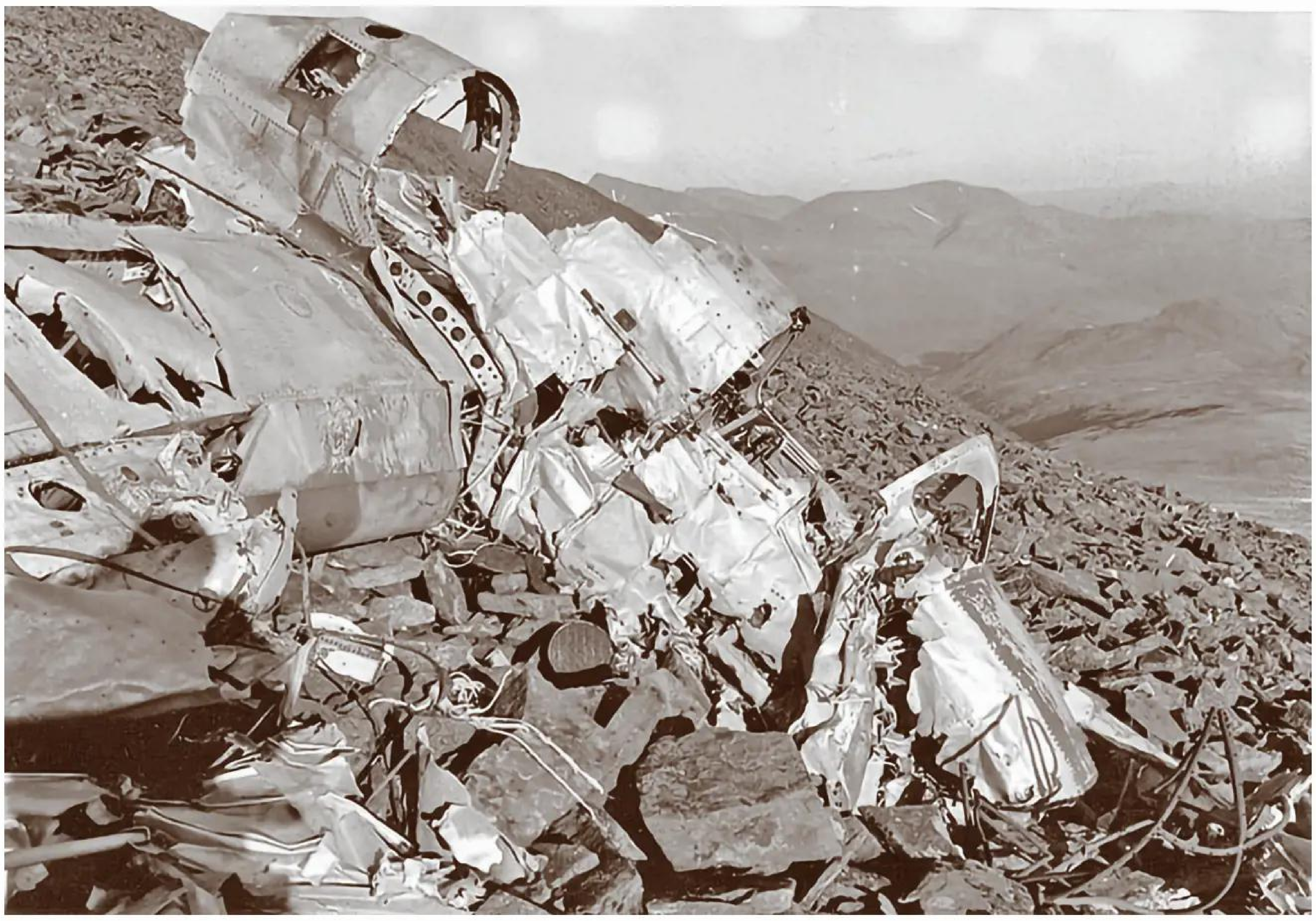
Even though the British still do not want to admit it, the Hampden was a terrible aircraft with all sorts of dangerous quirks and 23 OTU



The Canadian Hampden being raised to the surface. Sadly, the salt had caused huge damage and the structure was coming apart as it was lifted.



The rebuild of P5436 used many different materials including wood and plastic.



Hampden AE436 was discovered in 1976. The plane flew directly into a mountain and three of the crew were still with the craft. (Magnus Lowenstein)

was losing two to three aircraft per month — often with the crews. The RCAF got the idea that the planes were not only useless but also dangerous and by 1944 all the surviving 23 OTU aircraft were flown to Sea Island (now Vancouver Airport) and unceremoniously scrapped with not one airframe being put aside for future museum use.

On 15 November 1942, Hampden P5436 set out from Patricia Bay on a practice torpedo mission. The plane had recorded only 100 hours of flight time when it made its run down Saanich Inlet, which is near Patricia Bay. With the "torpedo" dropped, the pilot engaged in a low speed, low altitude turn when it entered what was called a stabilized yaw — one of the many flaws of the "flying suitcase" and probably something to do with the shape of the fuselage and lack of side area. Entering into a staggering stall, the aircraft hit the water, cartwheeled, and rapidly sank to 600 feet.

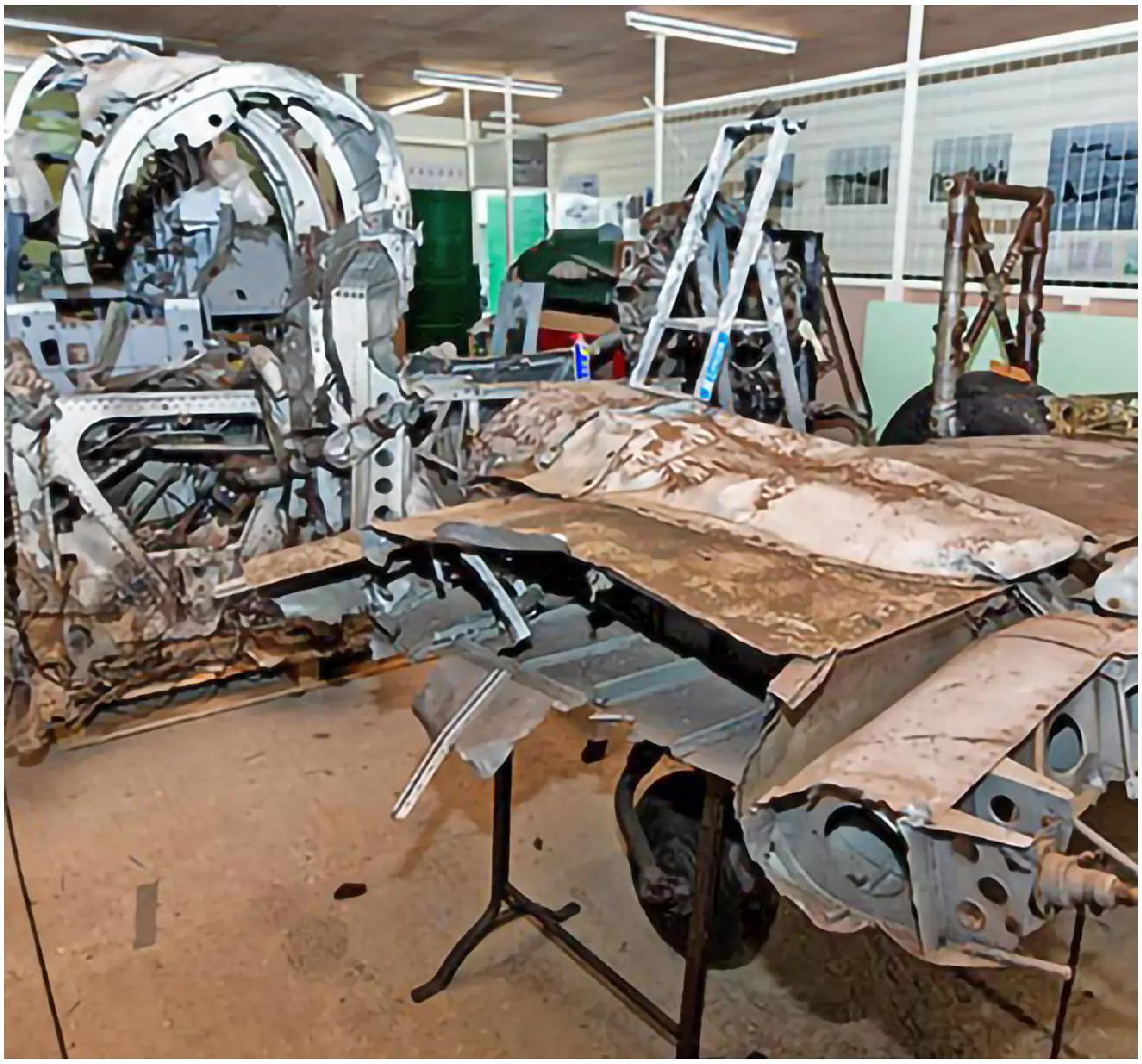
Somehow, the crew of four managed to scramble free — perhaps they were strapped in, tense, and expecting such an accident. Swimming in the cold water, the were sighted by the crew of an RCAF Stranraer flying boat (see last issue's "Friday Night Oldies") and the big biplane landed and picked up the four who were basically uninjured.

At least the accident saved the expense of flying the Hampden to the scrapping facility. In 1985, interest in vintage RCAF aircraft had grown and the Canadian Museum of Flight volunteers learned of the wreck of P5436 and this kicked off the difficult process of finding and recovering the aircraft. It was found via the use of sonar and deep-diving underwater cameras. It must be remembered that the water in which the plane crashed was salt water and it had really eaten up the airframe.

Jerry Olsen and his C-LOST team (Canadian Lake and Ocean Salvage Team) handled the difficult task and brought the corroding and rotten airframe to the surface. It was literally falling apart as it was raised. The remains were then placed in a hard owned by the museum but little was done to alleviate the salt that filled the airframe. Apparently, Hampden wrecks were numerous in the area and the museum gathered remains from crash sites where AN136 smacked into Mt. Tuam on Saltspring Island and AN132, whose mortal remains were on a mountain near Ucluelet.

What they had was a literal mess. That is when Fred Gardham entered the picture. A skilled WWII aircraft worker, Fred had actually flown once on the recovered aircraft following repair work. From his small workshop in downtown Vancouver, Fred got to work. Basically, very little was usable and Fred made patterns from the remains. He then replicated the pieces but nothing was created to an airworthy standard. In his 80s, Fred pieced together something that looked like a Hampden and it actually had some original parts. Then, the plane was placed on outside display with a number of other rare aircraft and it suffered more, actually collapsing under the weight of an unusually heavy snowstorm. For historians, it should be noted that much "non-aviation" material including wood, plastic, and other do-it-yourself items were used to piece the wreck together. Fred's dedication and skill was amazing but it should not be viewed as an actual Hampden — perhaps the classification should be "a shape that looks like a Hampden."

As noted in the captions, the wrecks of two more Hampdens have been salvaged and are in the United Kingdom. They are very long-term projects and it will take a tremendous amount of work to complete the craft.



Remains of Hampden AE436 at the Lincolnshire Aviation Heritage Center. During the flight to Russia, the aircraft went off course and flew into a mountain. Three of the Canadian crew were killed and two survived and were briefly interned in Sweden before being sent back to the UK on 21 September 1942. A military funeral was held for the three airmen still in the wreckage. The Swedish Air Force crated the wreck and it was shipped to England. It was acquired by the Lincolnshire group in 1989.

FLY IN THE P-51 MUSTANG!

WWII'S ULTIMATE FIGHTER

HISTORIC AIRCRAFT RIDES BEGIN AT JUST $99!

MUSTANG * SHOOTING STAR
KAYDET * TROJAN * SKYTRAIN

THESE RIDES MAKE FOR A PERFECT GIFT

CALIF AIR GUARD

Our immaculately maintained fleet of classic aircraft provide thrilling flight experiences for every budget.

Located in the heart of America's resort paradise, these rides provide a once-in-a-lifetime gift for a friend or loved one. We have over 75 rare aircraft displayed in a modern 91,000 square foot climate-controlled setting that is just minutes away from world-class vacation features.

CALL 760-778-6262 FOR FULL DETAILS

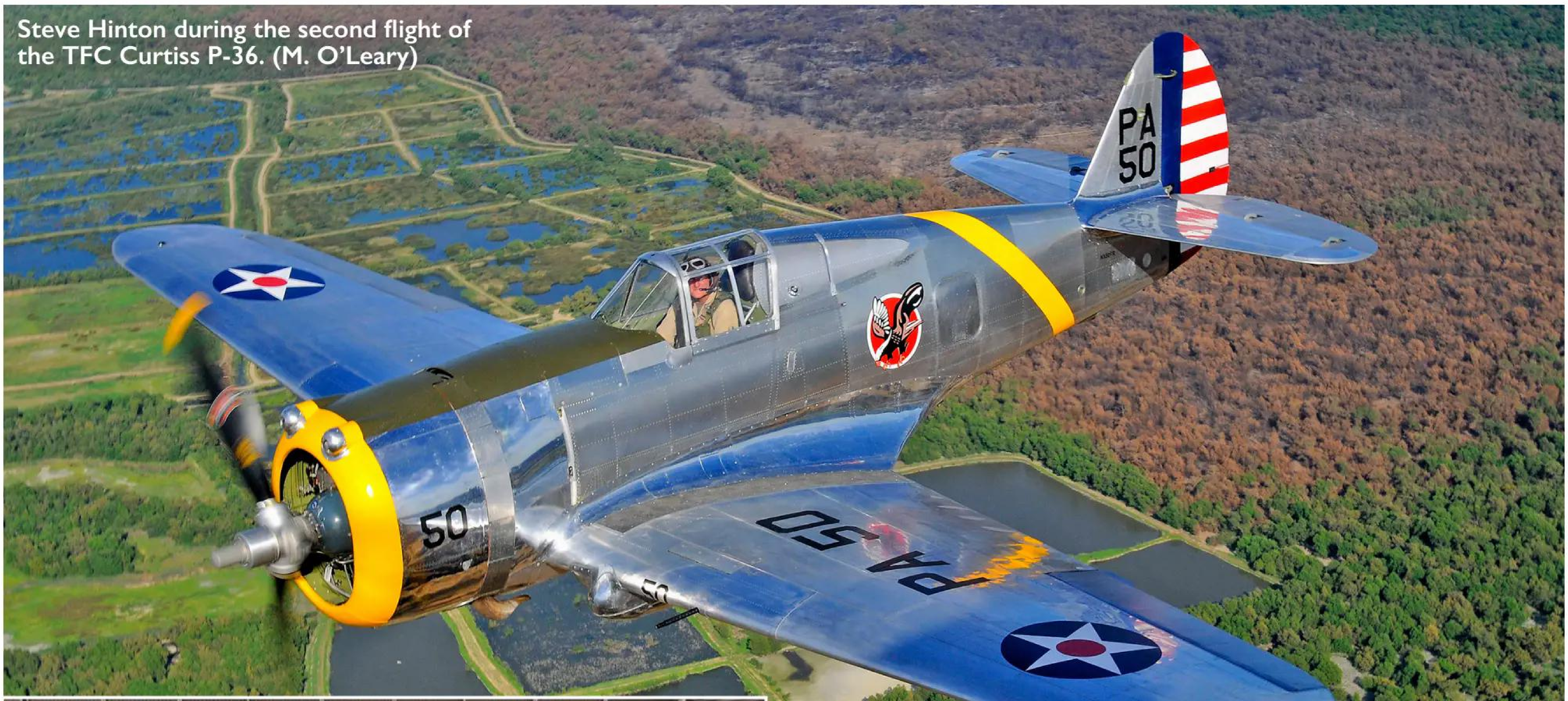
Also go to *www.palmspringsairmuseum.org*

PALM SPRINGS
AIR MUSEUM
EST 1996

PALM SPRINGS AIR MUSEUM

745 North Gene Autry Trail, Palm Springs, California 92262
Open daily 10 to 5 • Closed Thanksgiving & Christmas

Photography by Jarrod Ulrich, Michael O'Leary, and PSAM


Steve Hinton during the second flight of the TFC Curtiss P-36. (M. O'Leary)

The P-36 being disassembled at Duxford. (Eric Janssone)

CURTISS P-36 RETURNS TO USA

The rare Curtiss P-36 built by Matt Nightingale and his Cal Aero-Fab team is now returning to the USA. Originally, the pre-WWII fighter was built for British collector Stephen Grey and operated by The Fighter Collection at Duxford for ten years. Then a deal was stuck with California collector Walter Bowe and the plane was disassembled at Duxford then shipped by sea. Walt has also purchased a rare Curtiss CW-22 Falcon and a P-40N Warhawk and we will be reporting on these in the near future. Although the P-36 was a loss for TFC, it will be great to see the plane back in the country of its birth.

Warehouse Find!
R-1820-97-99 Cylinders
We just found 200 new R-1820-97 and -99 cylinders in our warehouse!
Enough to build 10 new engines for
B-17s • FM-2 Wildcats • Lodestars

Chester Roberts Supply Company
Overhauled Radial Aircraft Engines & Propellers
R-985 R-1340 R-1820 R-1830 R-2600 R-2800
2B20 2D30 12D40 22D30 22D40 33D50 23E50
Tel: 903-429-6805 • Fax: 903-429-6047
Crs5r@crsaviation.com
661 Pearce St. Collinsville, TX 76233
Buying engines/parts • propellers/parts
Top Prices Paid, Send List or Call

Paul "Major" Day with one of his beloved Spitfires.

SQUADRON LEADER PAUL DAY

Squadron Leader Paul "Major" Day has died. Paul joined the Royal Air Force in 1961 and earned his nickname after a tour flying Phantoms with the USAF. Since there was no USAF rank of squadron leader, he was given the temporary rank of major. The Major went on to fly as a fighter pilot and become one of the major sparkplugs of the Battle of Britain Memorial Flight. He would go one to record an unprecedented 24 years with the Flight while logging over 1000 hours on Spitfires. He also had the longest tenure in the position of commanding officer, going from 1998 to 2003 before retiring in 2004 after 43 years of service.

TEXAN ACCIDENTS

U.S.S. SARATOGA
93401
NAVY
N888WV

T-6G Texan N888WV coming in to land.

On 28 September, T-6G N888WV was landing at Pegasus Field Airport, Oakland, Tennessee, when the aircraft veered left off Runway 26. It then collided with trees and flipped over. The aircraft then caught fire. The pilot was seriously injured and rushed to a hospital. The Texan was destroyed.

The remains of T-6G N32SZ in which two people died.

On 20 September, T-6G N32SZ crashed and was destroyed near Louise, Texas, while apparently participating during a flour bombing activity at the 39th annual Under-The-Wire Fly-in. Eyewitnesses reported that the Texan got very slow while coming in behind two Stearman trainers and then appeared to stall. They also said the pilot started to recover but the altitude was too low and the Texan hit the ground so violently that the wing separated from the fuselage. Unfortunately, the highly-experienced pilot and his wife died in the crash.

The National Transportation and Safety Board has released its report on the crash an AT-6D Texan at Oshkosh, Wisconsin, on 29 July 2024 that claimed the life of Devyn Reiley and her young passenger, aviation enthusiast Zach Colliermoreno. The Texan had departed Oshkosh and flew over to nearby Lake Winnebago. The aircraft was at an altitude of around 3000-ft when it entered what appeared to be a series of aerobatic maneuvers according to spectators. It appeared that the plane entered a spin and never recovered before impacting the lake. The NTSB cites an inadvertent aerodynamic stall/spin as the cause of the accident. Log books show that Devyn had a bit less than 700-hrs flight time and only 33 of those were in the T-6.

Devyn Reiley with the accident Texan.

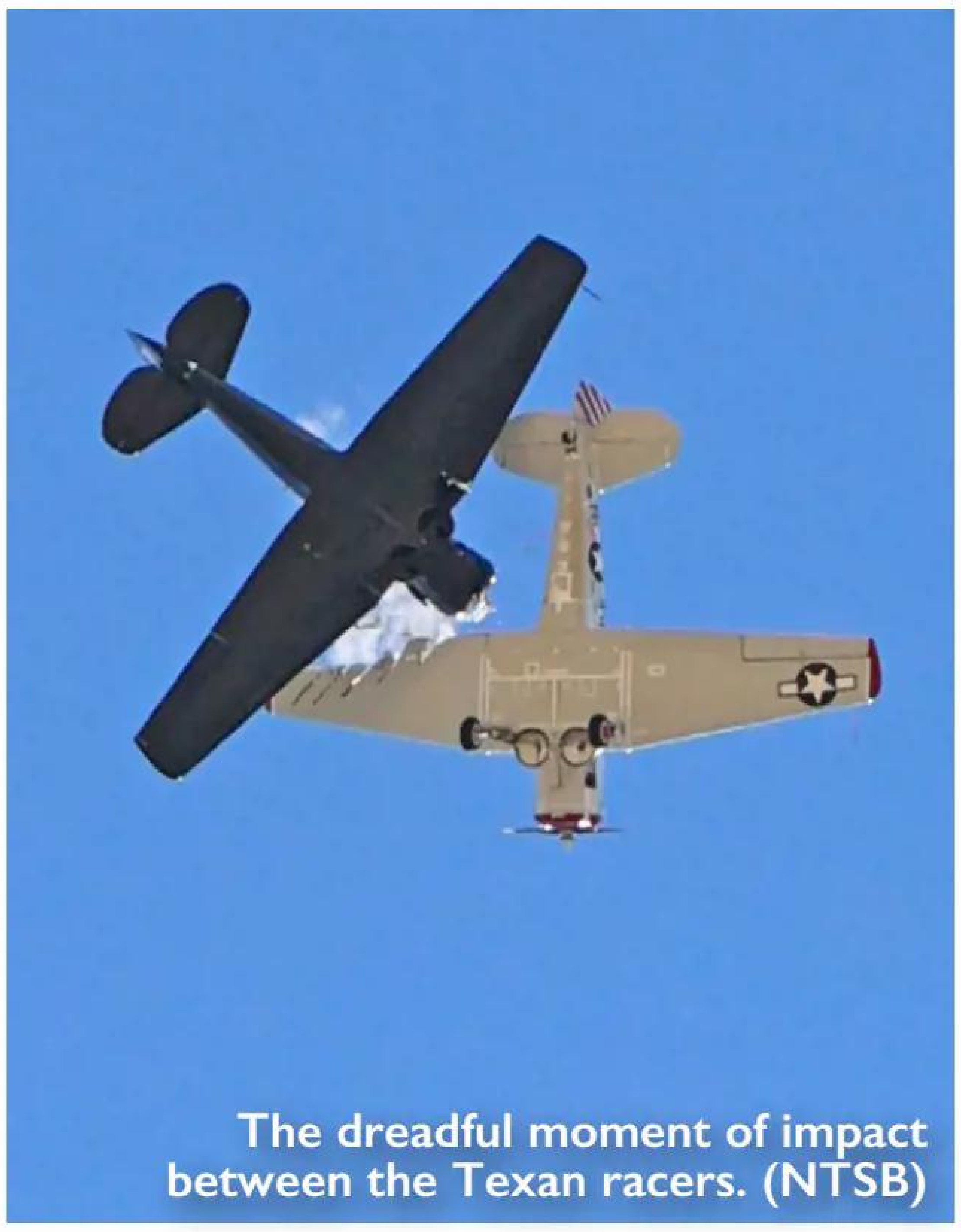
The NTSB has also released its report on the tragic mid-air collision on 17 September 2023 that brought the Reno National Air Races to a close. There is a lot to learn from this report. NAA T-6G N2897G Race 6 and NAA AT-6B N57419 Race 14 had just completed the Reno T-6 Gold and entered the airport traffic pattern for Runway 8.

The planes collided while Race 14 was on the base leg (southerly heading) and Race 6 was on the downwind leg (west-southwest heading). Witnesses, including the pilot of another race T-6, reported that Race 14 was on a wide base leg for the runway while Race 6 was closer in on the downwind leg for the runway. While the exact flight path of each racer could not be determined, based upon witness and other pilots' statements, along with Race 14's radio transmissions, it's likely that the wider pattern flown by Race 14, and the tighter pattern flown by Race 6, placed Race 14 to the right of Race 6's flight path. Given the pilot of Race 14's transmission "base with gear," it's likely that the pilot of Race 6 may have been looking to the left for Race 14.

The late afternoon sun at Reno is always a factor and on clear days it can be blinding. Sun data at the time of the accident showed that the center of the sun's disk would have been ahead and slightly to the right of Race 14's flight path, and to the left of Race 6's flight path, about 50-deg above the horizon.

An individual who was in the Race Control position reported that he was in the control tower providing advisory functions for the T-6 Gold Race. At its conclusion, after racers had exited the course, Race 14 reported midfield abeam for Runway 08. Race Control then advised Race 14 that he was in the No. 1 position to land. After Race 6 then reported midfield abeam, Race Control advised Race 6 that he was following traffic ahead on downwind. He further stated that when Race 14 reported base and gear, he had cleared him to land on Runway 9.

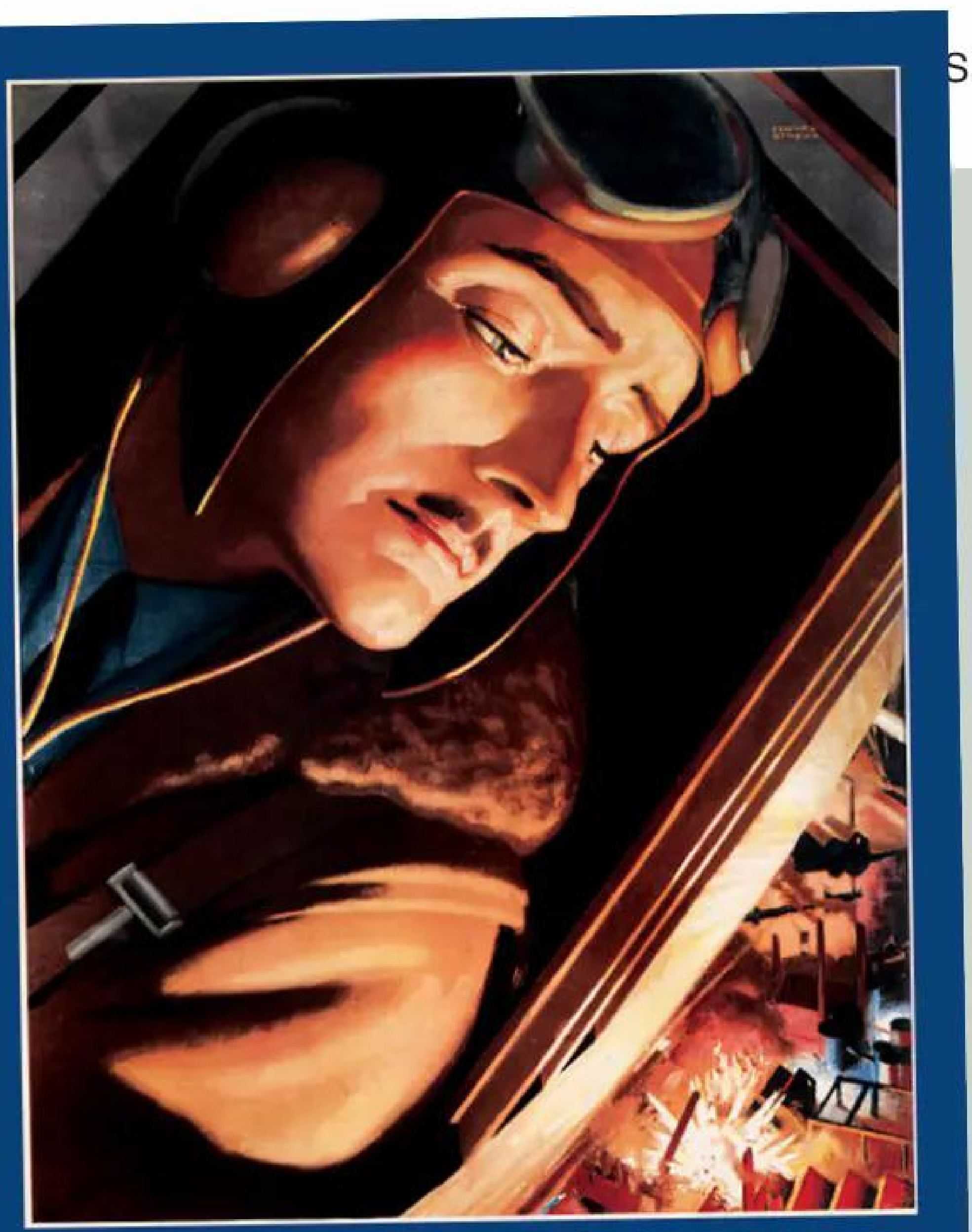
Soon after, other racers in the cool-down pattern started to report midfield abeam the tower. He advised them of traffic ahead on the downwind. Race Control then observed a T-6 falling from the sky about the location of the base leg for Runway 08. He then alerted people in the tower. Shortly after, he observed a second airplane falling and impacting the ground. A witness located along the edge of the airport property captured audio transmissions during the race. The recording includes various transmission from Race 14 and Race 6. Although there were multiple unintelligible transmissions, no discernible transmissions regarding a traffic alert from Race Control could be identified.



The dreadful moment of impact between the Texan racers. (NTSB)

Standard operating procedures outlined the duties for various positions of personnel in the tower at the time of the race along with expected radio transmissions by the pilots and tower controller. The operating procedures provided no distinct procedures for tower personnel to provide traffic separation. Additionally, the air boss stated that is an expectation but there was no written guidance.

Probable Cause: The failure of both the Race 14 and Race 6 pilots to see and avoid each other while in the airport traffic pattern. Contributing to the accident was both pilots' failure to fly the standard downwind and base legs.



WARBIRD & CLASSIC REPORT

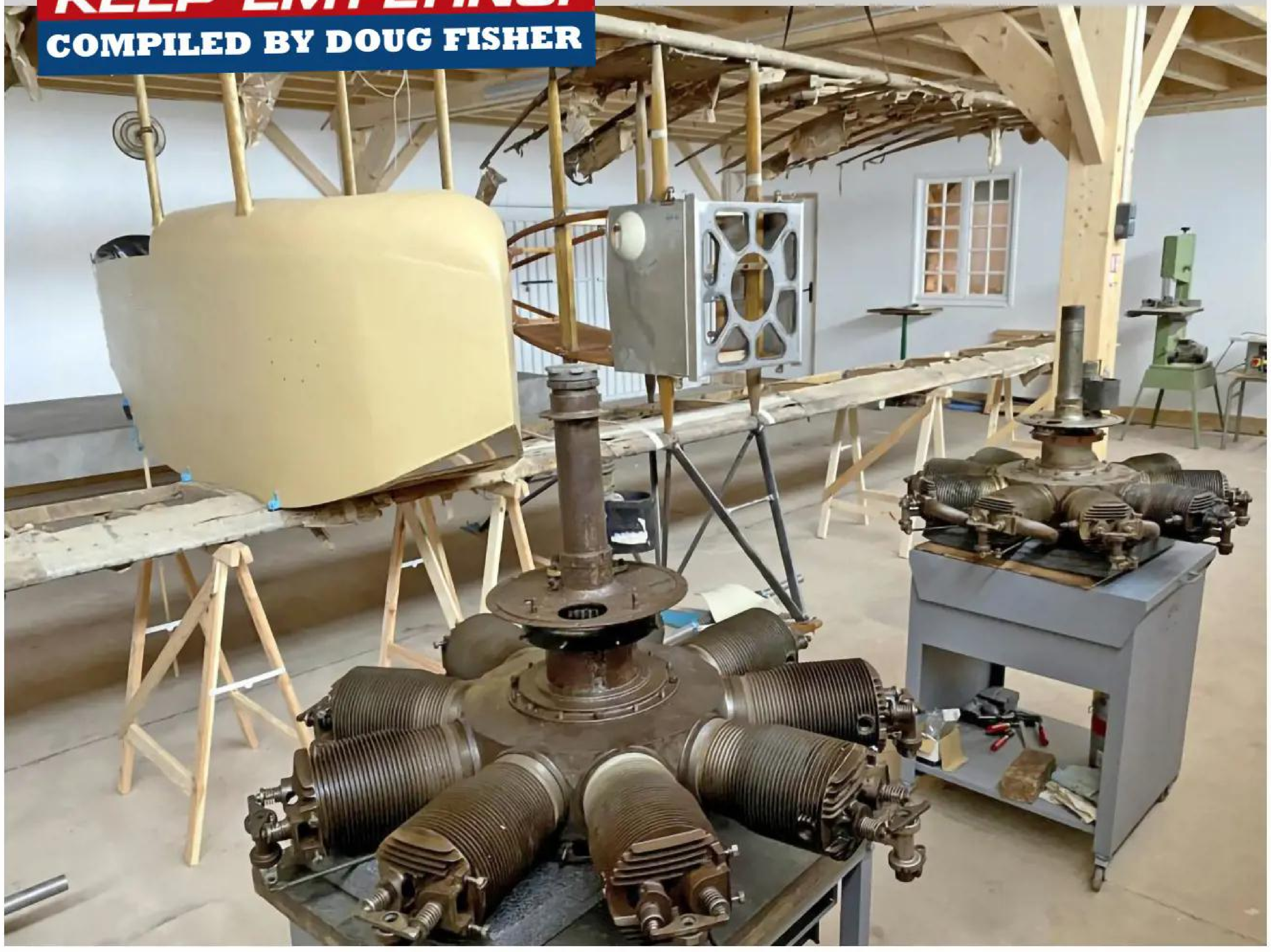
KEEP 'EM FLYING!

COMPILED BY DOUG FISHER

ABOVE THE TRENCHES

THE AMERICAN HERITAGE MUSEUM IS BRINGING RARE GREAT WAR SURVIVORS BACK TO LIFE

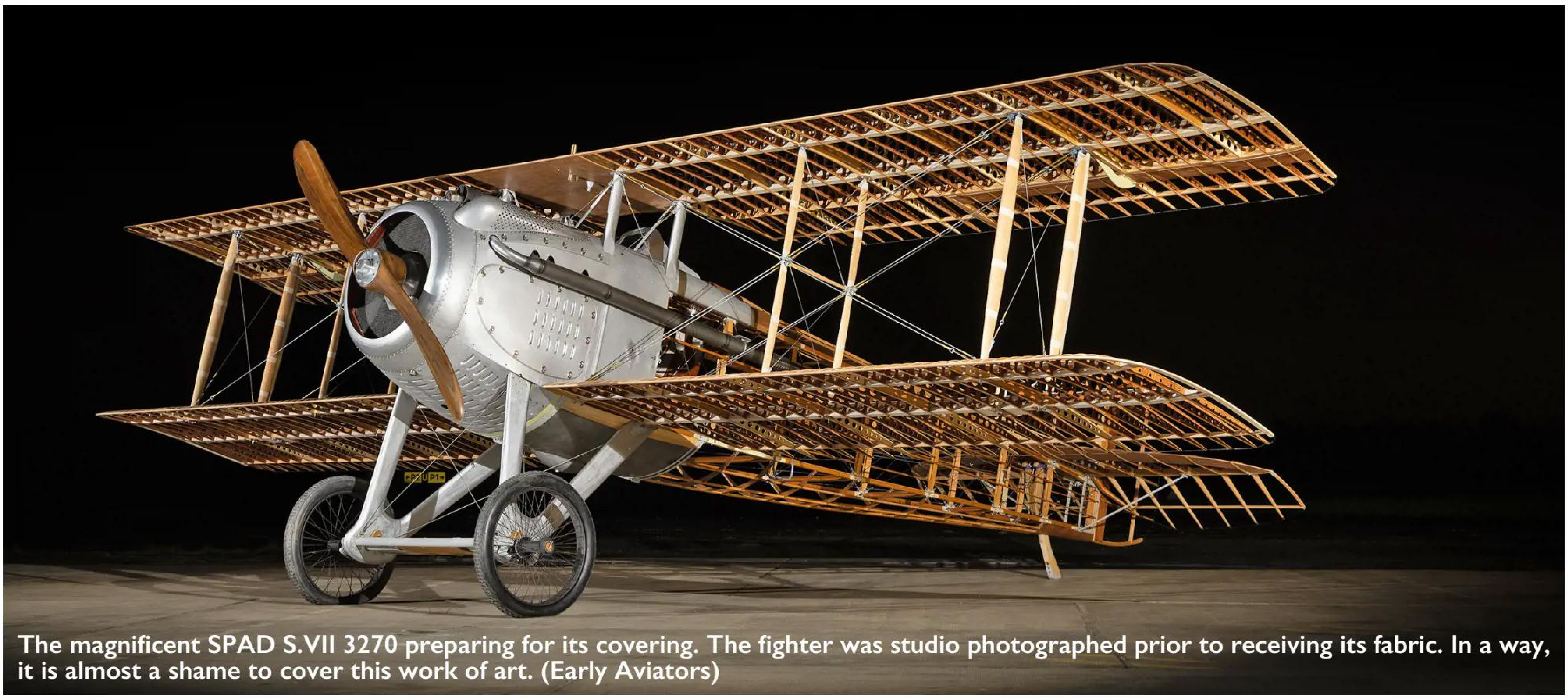
BY JOE SCHEIL



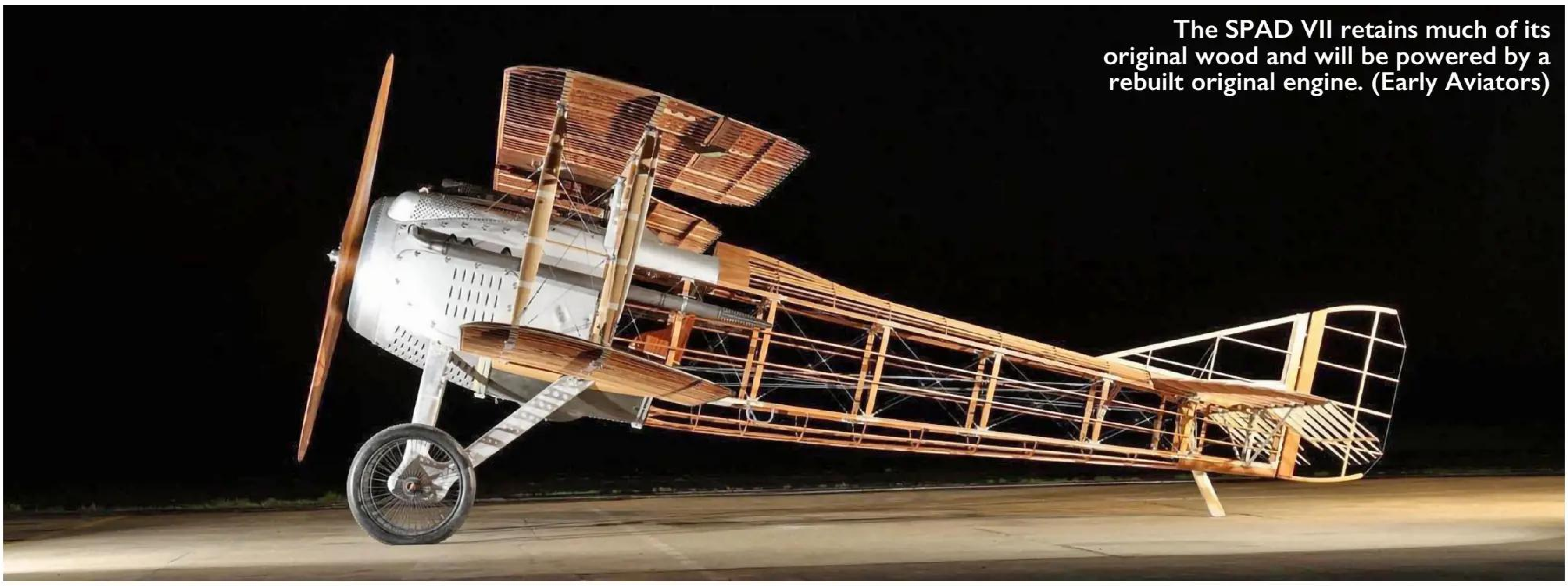
The Caudron G.4 under restoration in the workshops of Antoine Ros. The two rare 80-hp Le Rhone rotary engines are in the foreground. (Early Aviators)

They are still out there — hidden away in barns, outbuildings, and forgotten hangars. Aviation relics of the Great War — the "war to end all wars" but, in actuality, the jumping board for a coming new slaughter of international proportions. Europe still seems to be the place to find these fragile creations of wood, wire, and fabric. They are survivors covered by decades of dust and desperation — homes for mice and other rodents that enjoy snacking on the wood that was put together to create the machines that took the war into the sky over the blood, mud, and horror of the trenches — those few miles of gore-soaked earth where an entire generation was expended in the futile thinking of "antique" generals. The American Heritage Museum has found two of these survivors — and each is important to the French, British, and American fighting forces.

To the beleaguered troops filling the trenches that worked their way through the killing fields known as the Western Front, the sight and sound of the early aircraft that wheeled and turned in the blue sky above the congealed mud must have seemed as if they were coming from a completely different world. However, the pilots and crews of



The magnificent SPAD S.VII 3270 preparing for its covering. The fighter was studio photographed prior to receiving its fabric. In a way, it is almost a shame to cover this work of art. (Early Aviators)

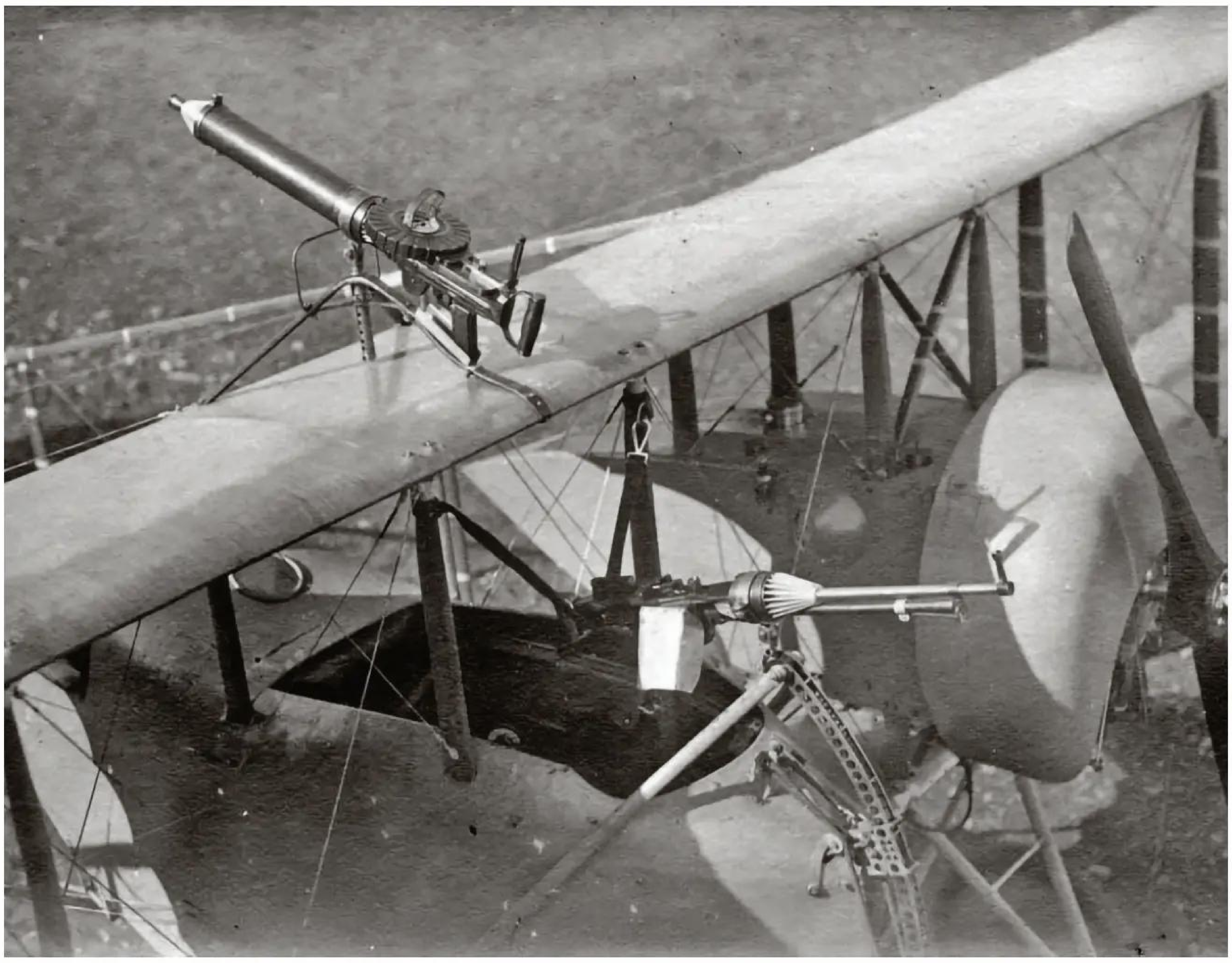


The SPAD VII retains much of its original wood and will be powered by a rebuilt original engine. (Early Aviators)

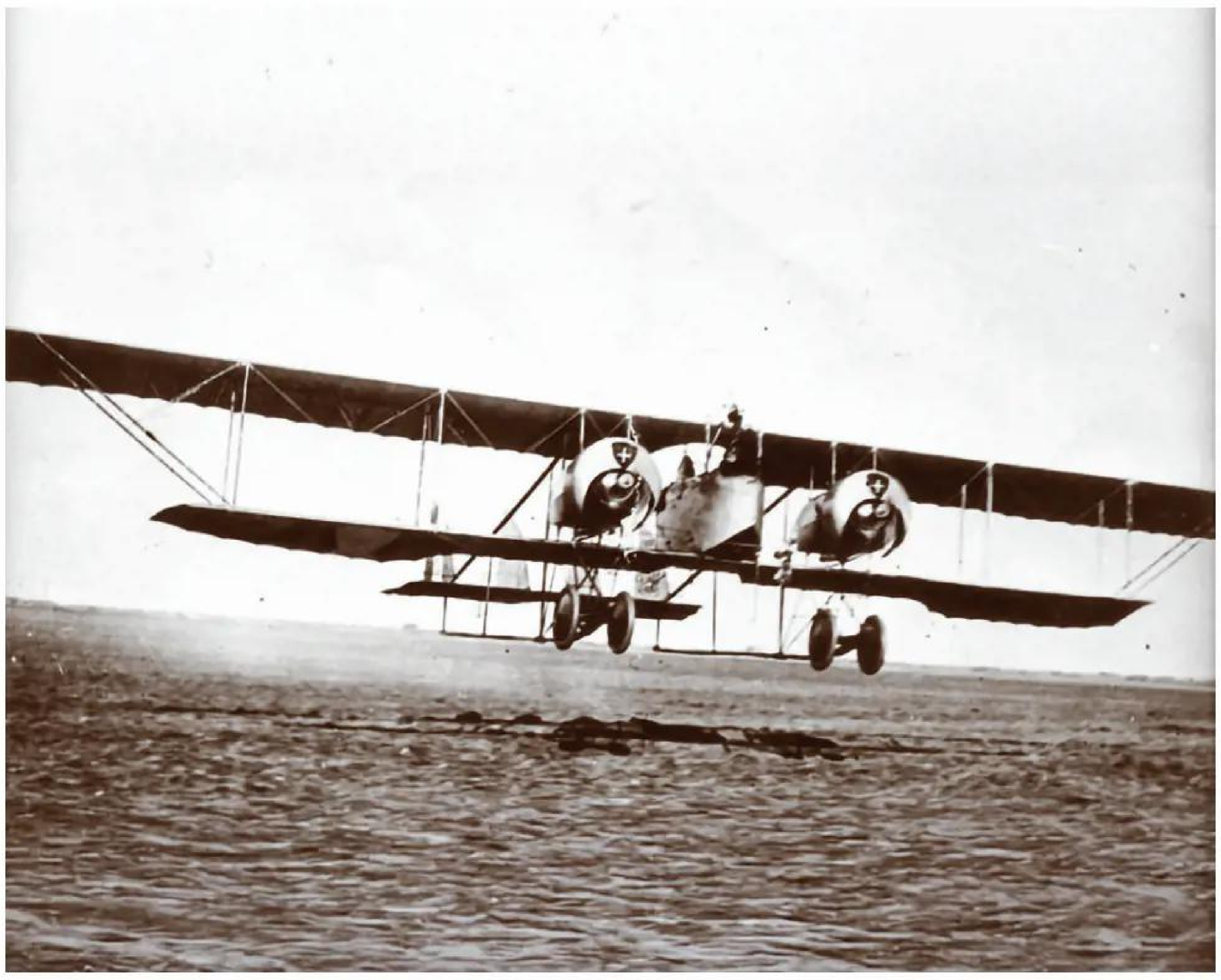
these flying machines all faced their own particular horrors as they fought opposing aircrews in an attempt to stay alive. Flimsy, built of wood and fabric with little to no armor protection and fuel tanks that would erupt into sheets of flame with just one bullet strike, being airborne was still a much better option than the trenches.

One of the more interesting designs of the early period of the Great War came from two French brothers — Rene and Gaston Caudron. *Societe des Avions Caudron* was one of the earliest French aircraft builders and we must remember that France, at that time, was leading the world in aeronautical sciences with literally hundreds of new designs coming from a variety of builders.

The brothers Caudron was a pair of clever lads that opened shop in 1909. Both had been raised on a farm but both had also gone to college, which was somewhat rare in those days. Gaston loved engineering and was fascinated by all forms of things mechanical but he had been born with poor health and his education was cut short by constant sickness. Rene also enjoyed mechanics but, being more robust, he was also a sportsman and liked the outdoor life. Both were able to join the military,

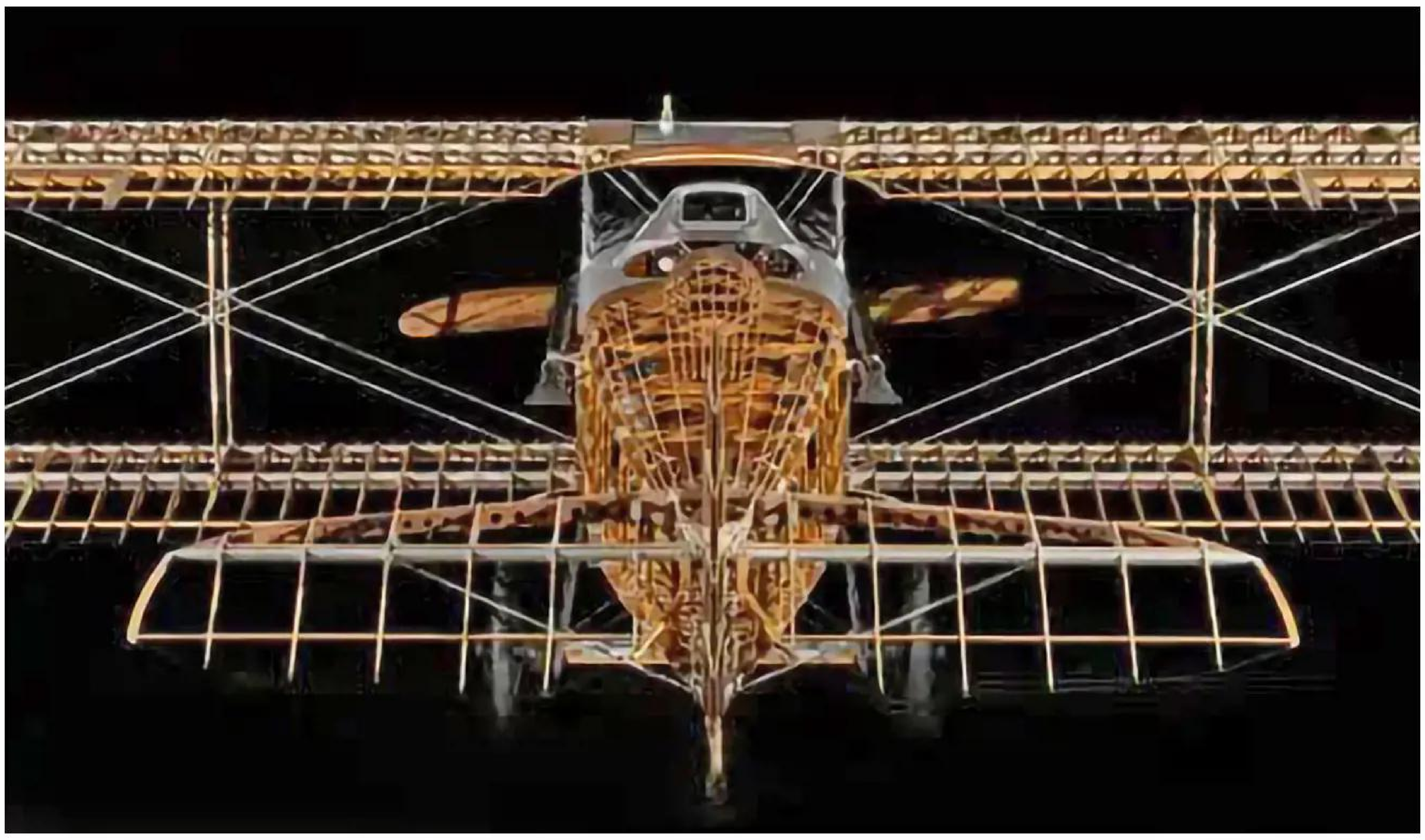


Armament configuration on a G.4. Proximity of the gunner to the propellers can't be discounted. Some British variations toted four machine guns.



A G.4 heads out on a mission. One of the first twins that could fly on one engine, control was possible because of the four rudders, light weight, and strong engines.

As the war progressed, the G.4s became targets for a new generation of German fighter aircraft as well as improved anti-aircraft weapons.



Rear view of the SPAD prior to covering. It appears that the structure is delicate but the SPAD was an extremely stout aircraft.

odd considering Gaston's medical ailments, and after they completed their time with an artillery regiment they returned to the homestead.

Aviation was literally on fire in France and the boys returned with piles of books, magazines, and plans related to aeronautical development. Conspiring over a drafting board lit by oil lamps, they sketched out plans for a large biplane. Remember, this was still early days for flying aircraft and they really did not know how to convert many of their ideas into reality. Still, they forged ahead and built their plane. One problem — they could not figure out how to get a reciprocating engine. That problem was pushed aside when they made the decision that their craft would be a glider that would be towed aloft by a horse!

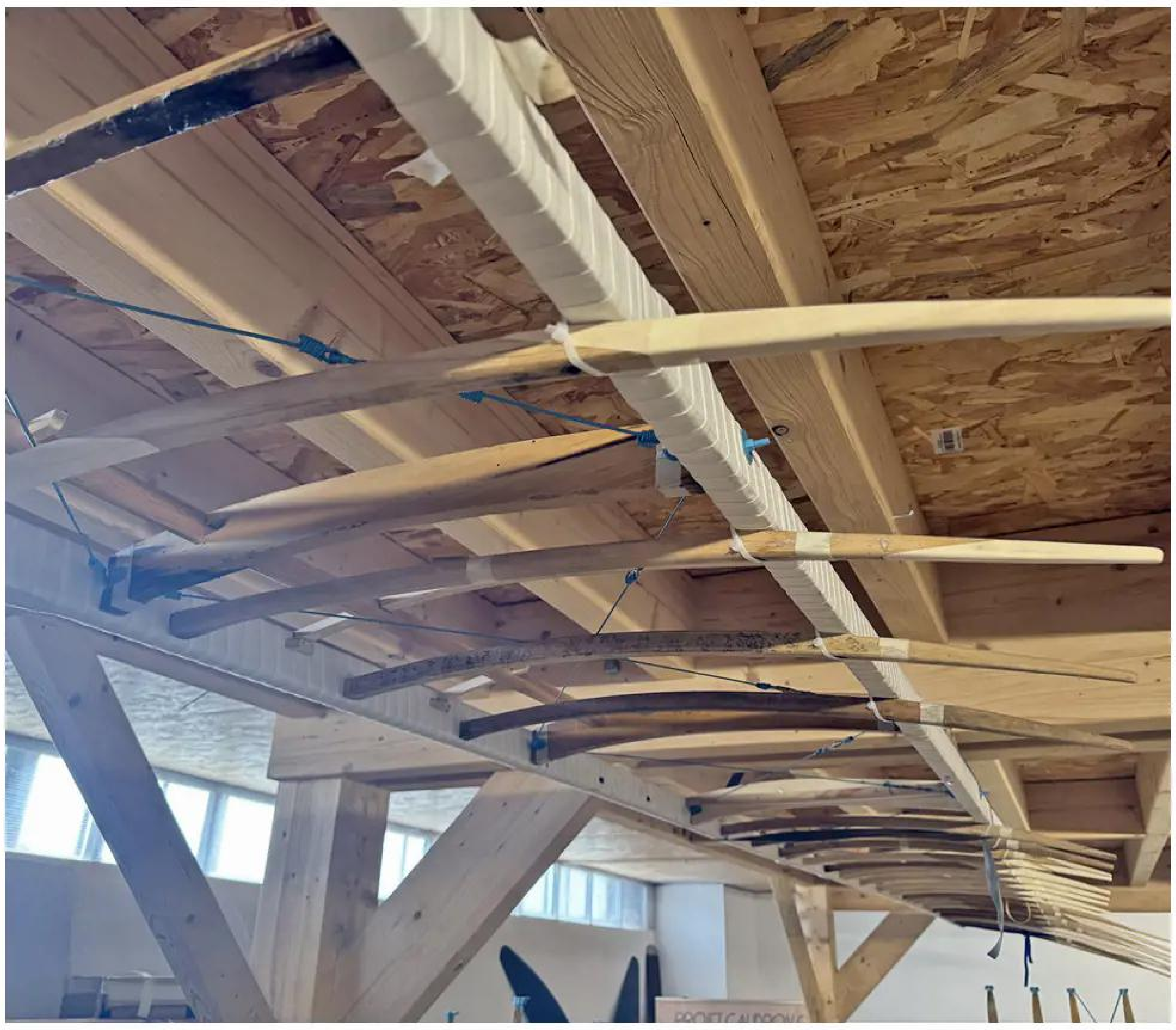
This did not work out particularly well and after consulting with other interested parties, they did get an engine and their plane flew during September 1909 and eventually went a distance of six miles. The men began to make one forward step after another — establishing a factory at Le Crotoy, opening a flying school, and building many of their designs. Aviation is, and was, fraught with danger and Gaston would die in an aircraft accident on 15 December 1915 but Rene would carry on with the business until it was overrun by the Nazis.

One of their most important designs was the G.3. A large, rugged, wing-warping sesquiplane that had the pilot and engine ensconced in a pod. It seemed that the basic design had room for growth. The G.3 turned out to be a relatively reliable recon platform but it could not take a useful bomb load aloft and, due to where the engine was mounted and where the pilot sat, could not be equipped with a machine gun to defend itself from the forward position. If attacked by two or more German scouts, the G.3 became "easy meat."

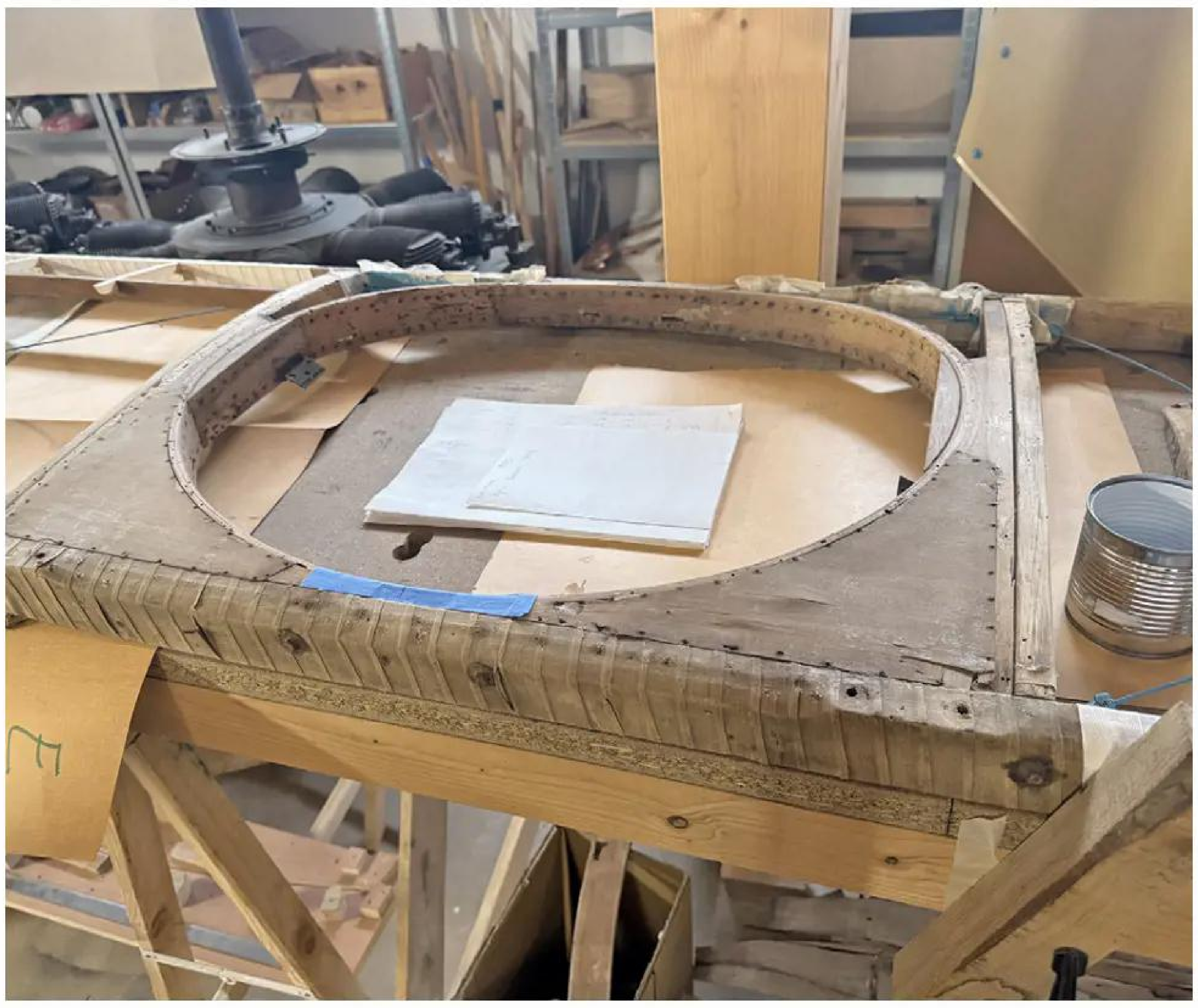
This led to the G.4, the first of which flew in March 1915. Designed from the start as a twin-engine aircraft, the closely placed engines could be either Le Rhones or Anzanis. If one engine failed, their close proximity helped the pilot maintain control — aided by the addition of four large vertical tails. There was a nacelle between the engines that held the pilot and the gunner. The gunner had a superb field of fire but he was also perilously close to the propellers. The twin-engines also allowed a small bomb load, along with a variety of machine guns, to be carried aloft.

With its wing area of 410-sq-ft (the top wing spanning a creditable 56-ft 5-in), G.4s were soon clawing their way into the heavens to set altitude records and on 9 November 1917, Italian pilot

Robert Soubiran was the commanding officer of the 103rd Aero Squadron in France. He is seen with his later SPAD XIII. The Americans liked the fighting abilities of the French aircraft.



Detail of the reconstruction of a G.4 wing. Dark wood is original, light wood is newly made from original blueprints. (JS)



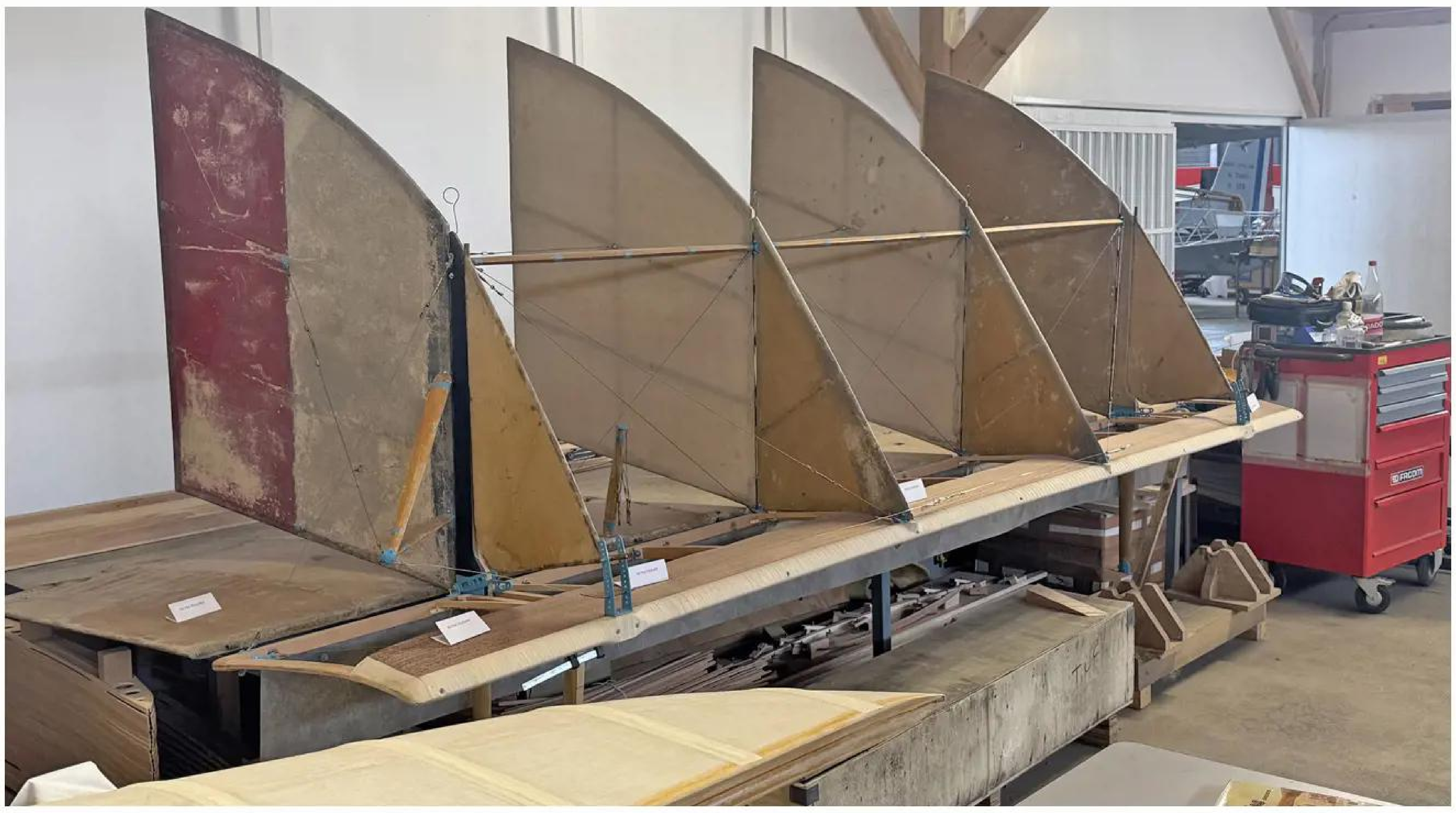
Work going on during restoration of the G.4 nacelle. Note the original fabric, which will be retained when the plane goes on display at the American Heritage Museum. (JS)

Guido Guidi got to 26,083 feet for a world record. However, the world did not need records — it needed warplanes that could attack the Germans. Orders were sent to Caudron that would see the company build 1358 G.4s while Italy constructed 51 aircraft and a British subsidiary built just a dozen. However, it should be noted that the G.4 still utilized wing-warping and has no ailerons!

Going into combat with the *Aeronautique Miliaire* during November 1915, it was the first twin-engine aircraft to be operated in any numbers by the French. Daring pilots took their G.4s deep into German territory to drop bombs on the hated Hun. Many of the most famous of French aces literally cut their combat teeth with the G.4 and scored numerous victories.

Italian pilots enjoyed the G.4's altitude capabilities and were able to fly over the Alps to bomb German targets. In England, the Royal Naval Air Service received 55 (including the dozen built in the UK) to serve as bombers and the planes were successfully used to attack Zeppelin hangars and seaplane bases. The Imperial Russian Air Force also operated some but the US government, noting the type's success, decided to buy an example in 1917 and this led to the purchase of a further ten at the end of 1917. These planes were used as trainers at the Air Service's 2nd Air Instruction Center at Tours.

As time went on, and enemy opposition increased, all services tried to hang more guns on the G.4 and while these offered extra protection, they also dragged down performance since the little rotaries were only producing 80-hp each (however, it must be said that these were "big horses" due to the engine's torque). By the autumn of 1916, it was getting too dangerous for the G.4 to venture out in daylight and they were withdrawn from French bombing missions. However, a number were utilized on equally dangerous night raids.


One of the major discoveries for the G.4 project was this horizontal/vertical tail still retaining its original Great War fabric! (JS)

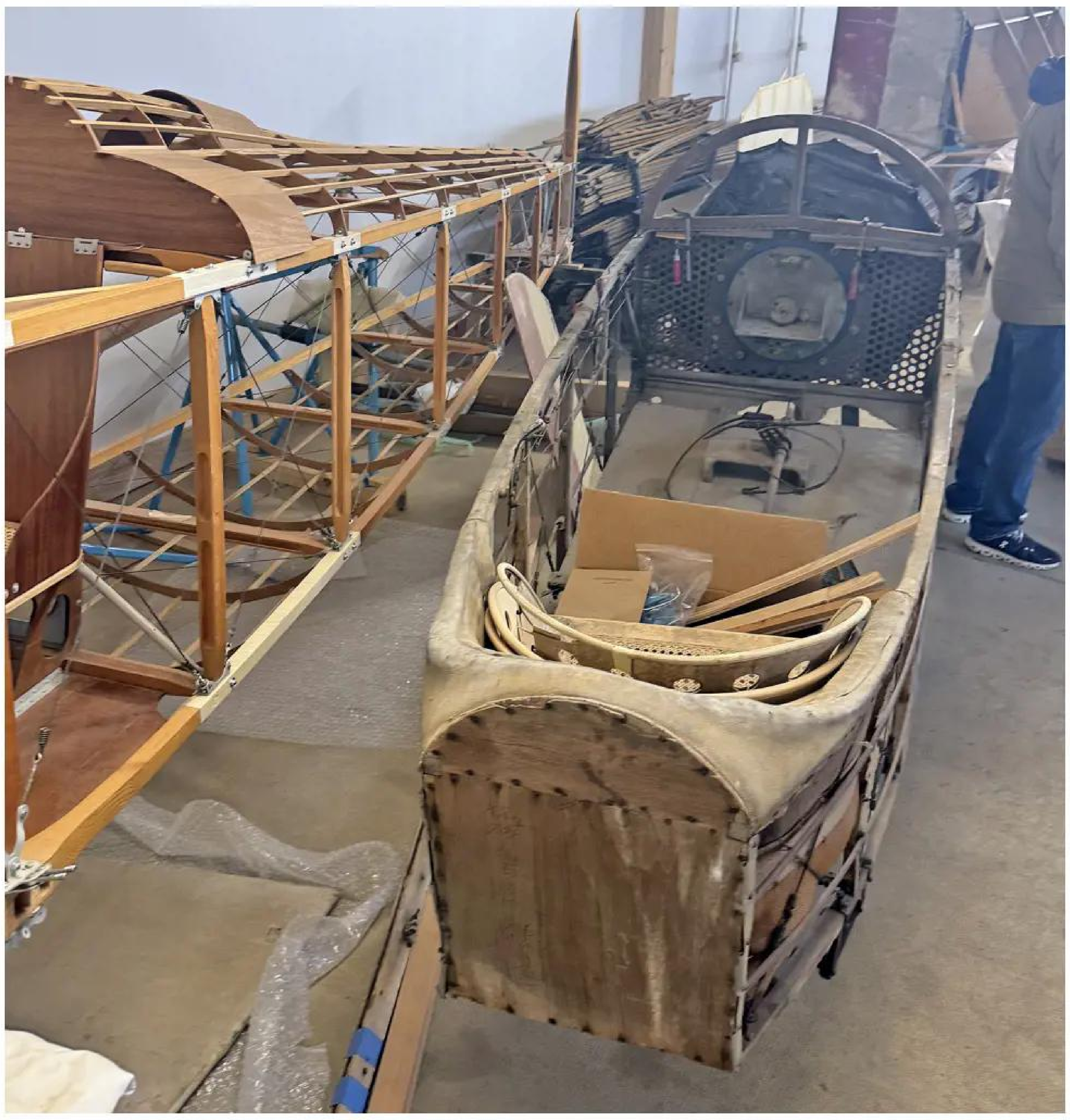
The end of the war saw the majority of surviving G.4s burnt as kindling but a few did go on to be modified for civilian use with some hopping four or five passengers in an expanded pod from seaside resorts. Many G.4 components were sold as surplus and these found their way onto French farms where they were put to a multitude of uses.

"The Great War is extremely important in telling the American experience in combat," said Rob Collings of the American History Museum. "I had been on the look-out for original examples of the G.4 but kept coming to dead ends." Only two complete examples were known to exist — Caudron G.4 serial C.1720 in the *Musee de l'Air et de l'Espace* in France, and G.4 C.4263 lovingly preserved at the NASM Steven F. Udvar-Hazy Center in Virginia.

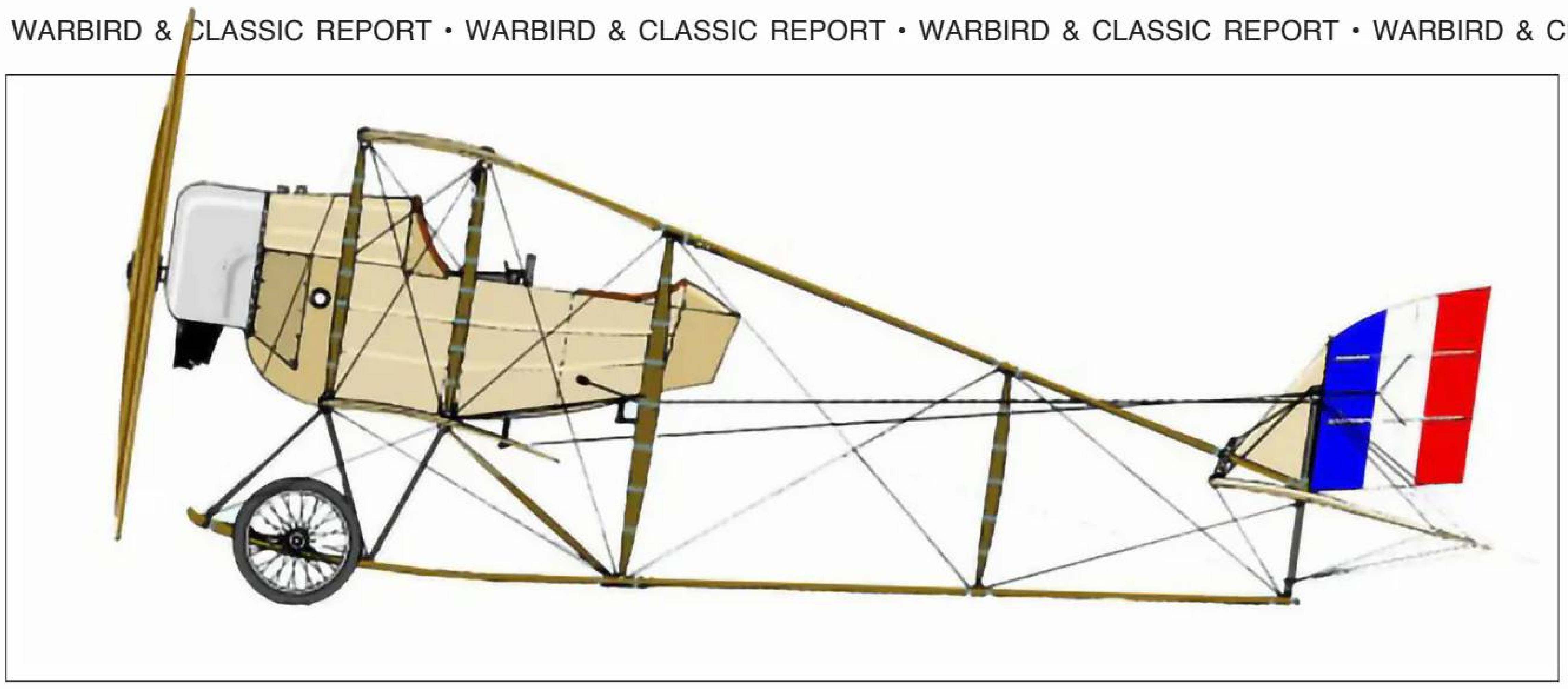
When Rob was in Sweden watching the first test flight of the American Heritage Museum's Nieuport N.28 that had been done by Michael Carlson, he met an enthusiastic French aircraft collector named Antoine Ros. When he was in his 20s, Antoine became interested in anything and everything associated with French participation in the Great War. He began scouring the French countryside with the belief that relics were still out there. He was absolutely correct and he began hauling his finds off to his expanding base near Tours. Over the years, his hunter's instinct as well as his technical and flying ability increased to expert level.

Antoine's enthusiasm was contagious and Rob planned a trip to visit his facility. On arrival, he was stunned by what Antoine had accomplished. His facility, named Early Aviators, is on the Tours-Sorigny Airfield and comprises 14,000-sq-ft with 2700-sq-ft of insulated workshops. They are capable of undertaking all vintage aviation restorations.

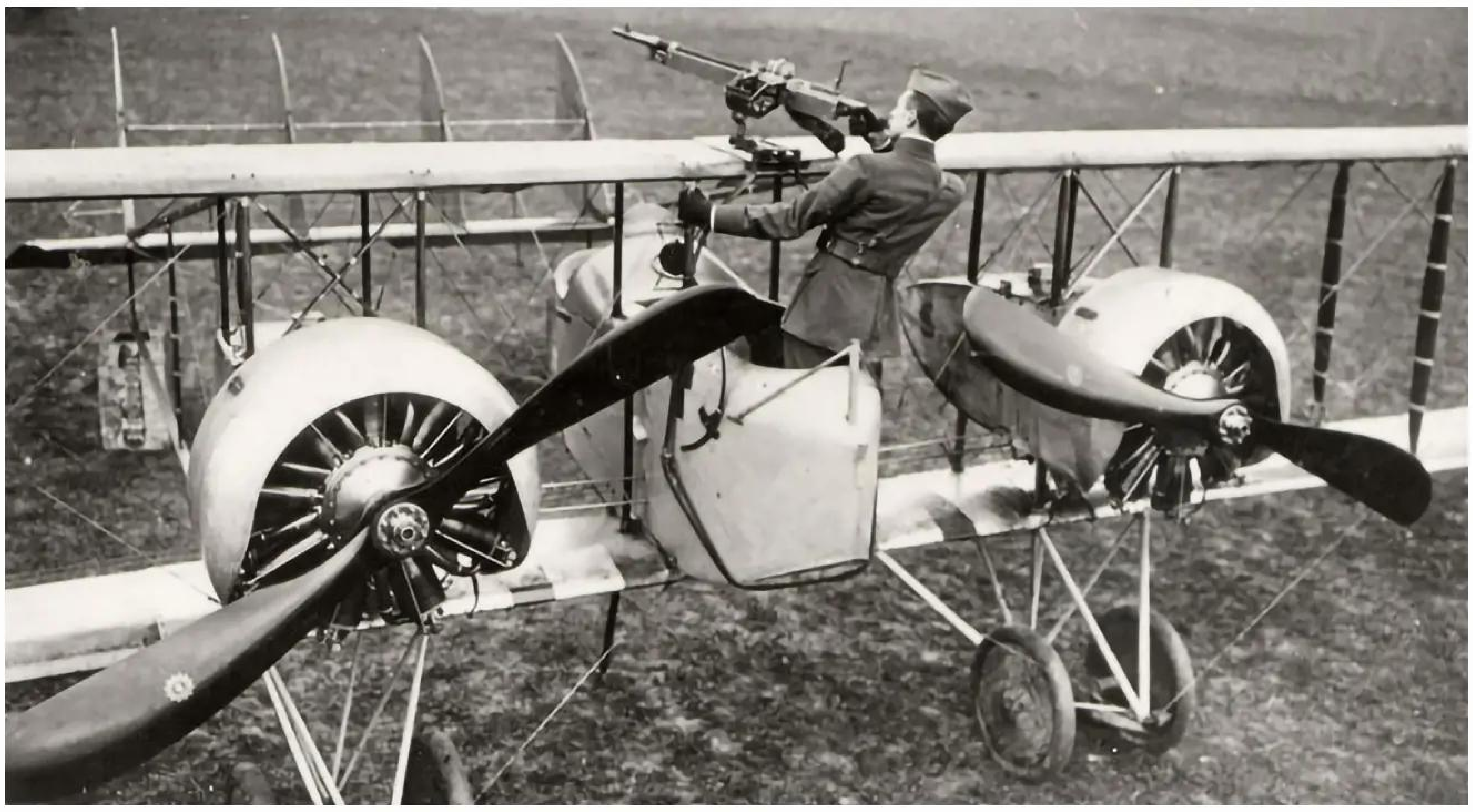
However, Rob was at the field to view three


The G.3 fuselage next to a new-build SPAD VII fuselage. (JS)

More original Caudron components gathered from throughout France. The original wheels for SPAD 3270 are on the left. (JS)



The Caudron G.3 enjoyed a great deal of success and Antoine is hoping to find a supporter that will return their project to the sky.



As can be seen, the gunner's position in the G.4 was hazardous. Imagine the gryro forces combined with wing-warping!

very specific aircraft — a Caudron G.3, Caudron G.4, and SPAD S.VII serial 3270. To see these basically unrestored Great War aircraft in their home country was a moving experience. These were the aircraft with which the French beat the Germans and there is a proud, patriotic feeling regarding these machines. There are about 110 aircraft from the Great War surviving today. Less than 10% are privately owned, so seeing three projects that were available in one place was nothing short of incredible.

Antoine and his employees have saved every original scrap of WWI material. They can look at a box of splintered wood wing ribs and carefully examine each relic — it is sort of like a giant puzzle — and they fit the original wood bits into newly-constructed ribs. You can see this in the photos as the original wood is dark while the new wood is light in tone. "I was truly impressed on how they were saving every bit of ragged fabric and wood to guarantee the importance of each original airframe," said Rob..

The Caudron G.3 single-seat aircraft comprises the center nacelle for pilot and engine along with other original parts. The G.4 was of particular interest to the American Heritage Museum since the type was flown by Americans and saw the beginning of long-range bombing missions. With its nearly 57-foot wingspan, the G.4 is a big airplane and the two Le Rhone rotary engines were sitting near the airframe. The work on the airplane by Antoine and his team was wonderful. The parts for the now ultra-rare G.4 were gathered from a number of sources and the missing components are, once again, being constructed from original plans. Walking around and touching this antiquity brought a direct connection to those brave aviators who took these aircraft over the trenches.

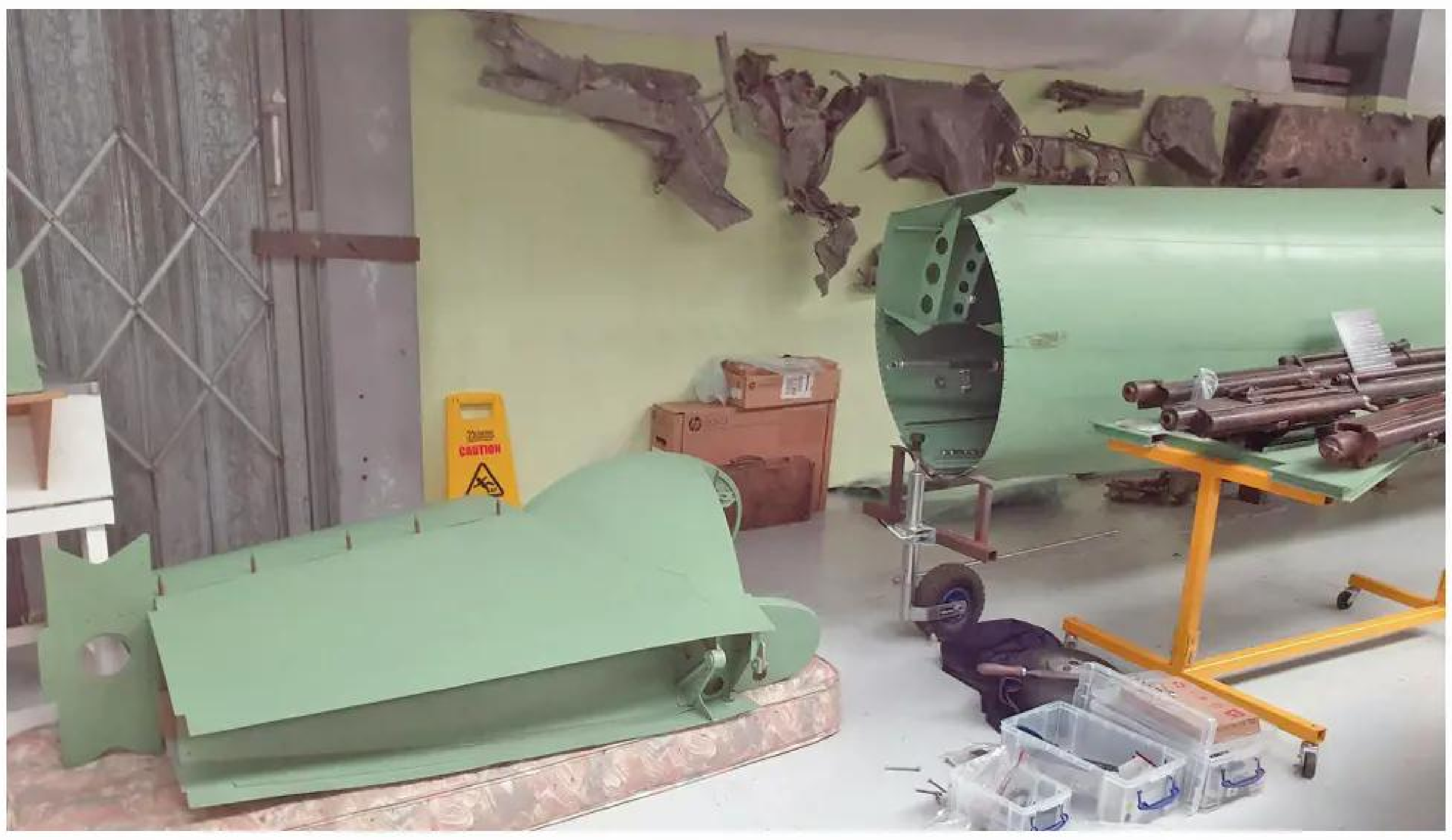
The American Heritage Museum, attempting to create a collection that traces the progression of 20th Century Wars, knew the G.4 was of vital importance. A friend of AHM concurrently purchased the original SPAD S.VII and initiated its restoration to flying condition. The AHM purchased the G.4 and the restoration will be completed by Early Aviators at Tours. The G.4 will be restored with its remaining original wood and original fabric still in place so visitors to the museum will be able to see how the plane was constructed. This is where some debate came in regarding the G.4. Considering the rarity of the type, Rob made the decision not to fly the aircraft. The resultant decision was that the G.4 will be preserved to the highest degree possible due to the amount of original material, but it will remain on the ground. It will be ground run and be a "living" aircraft to an extent. It will also be the only Great War multi-engine aircraft that is privately owned.

The SPAD S.VII survivor is identified as a Janoir-built S.VII serial S.3270. It is an incredible find as even today's replicas have been made from replicas for years. Due to the opportunity to have the Janoir-built example as a starting point combined with original blueprints, a decision was made to construct a series of accurate reproductions by re-engineering original plans from the Edmond de Marcay factory in Bordeaux — one of several companies that built the type under license. These reproductions were financed by Fox-Aviation Historique and could be offered for sale. These are not "replicas" but rather exact and perfect continuation SPAD S.VIIs. They will have new-build Hispano Suiza V-8 engines that will be 100% able to exchange parts with legacy engines. It is an incredible project.

Work on S.VII S.3270 is well-advanced and the aircraft is being covered as you read this article. The SPAD has been restored to an airworthiness standard and will make its public debut in 2026 after private test flights are completed and the aircraft is thoroughly tested. The amazing history and deep connection we have with the SPAD as Americans is very important to the AHM. Referring to the Skyraider owned by AHM (and which had the nickname "SPAD") Rob said, "We are very glad to have both iterations of the SPAD, the French one and the Douglas example that fought over Indochina as well,"

"Both these aircraft are a wonderful addition to the American Heritage Museum and we invite all *Air Classics* readers to visit us and also view our plans for expansion," said Rob. There is a lot more to come and we will be reporting the news in upcoming issues.

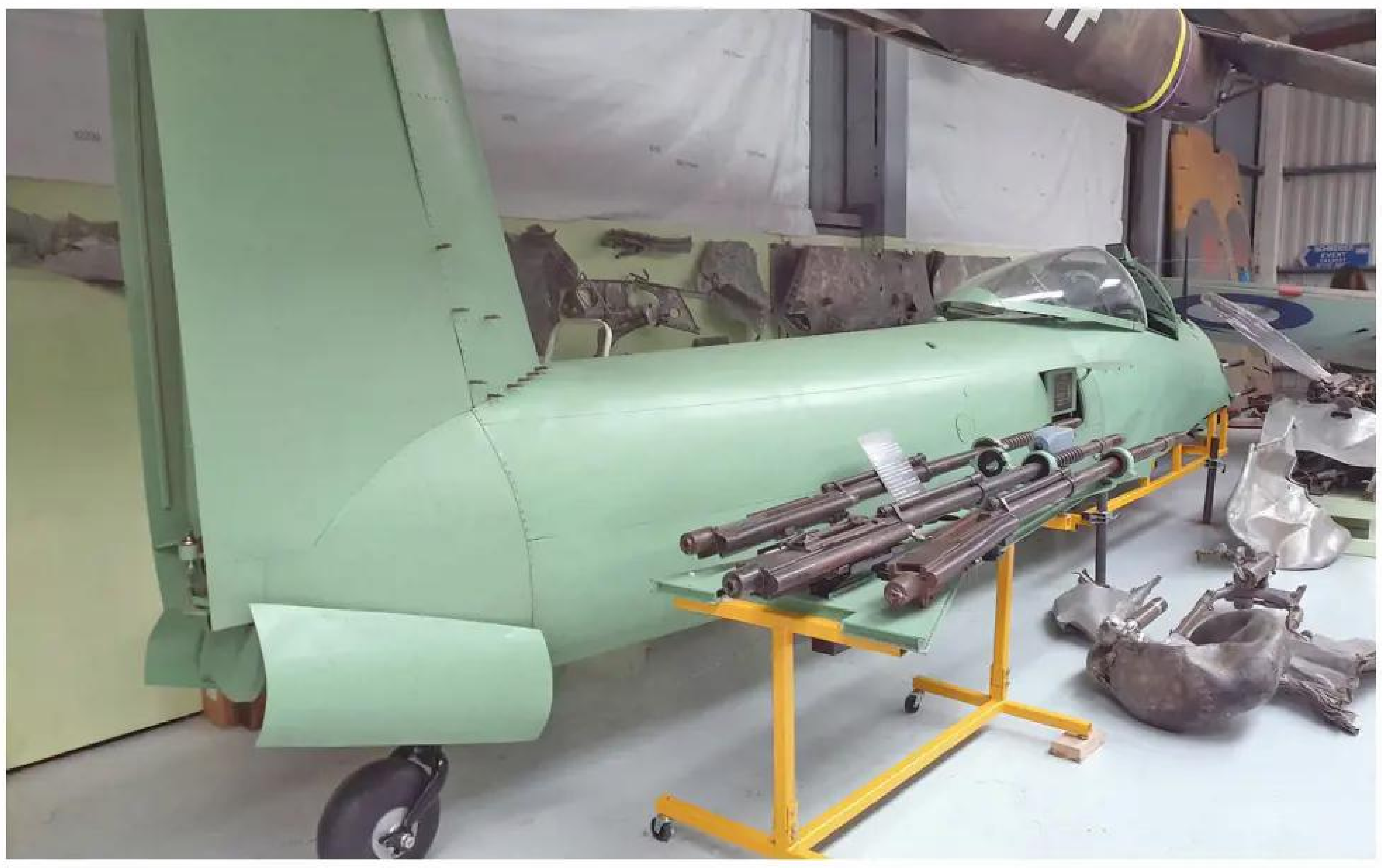
This British-built SPAD VII was shipped to the USA to equip the fledgling Air Service. They were perhaps 10/15-mph slower than the French-built SPAD S.VIIs.



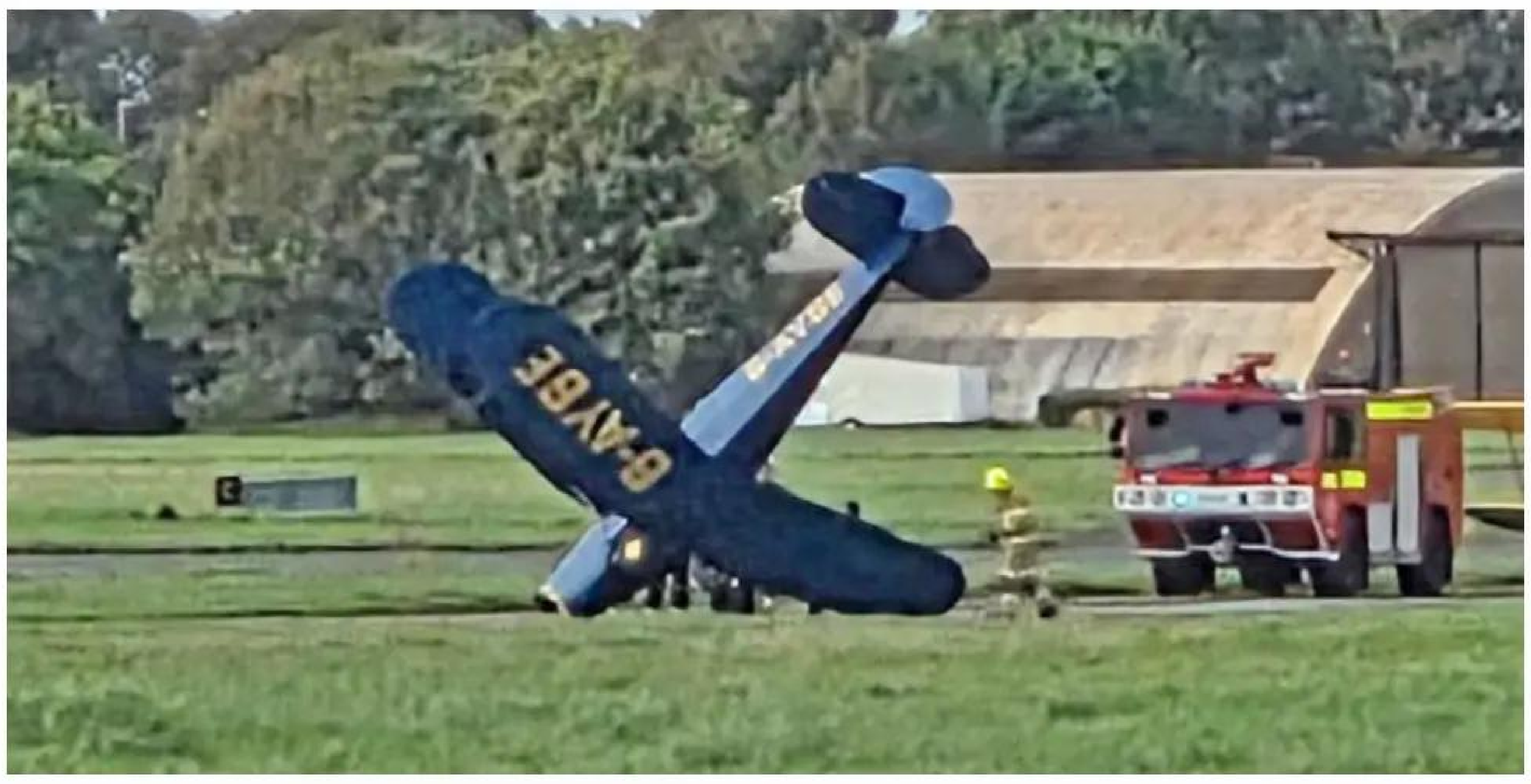
Preparing to install the rear fuselage onto the Whirlwind.

WHIRLWIND REPLICA PROGRESS

In Britain, one of the stranger projects continues as the Westland Whirlwind Fighter Project pieces together more parts with the arrival of a lower tail section built by volunteers. Once that unit was installed, control cables were added, and the tailwheel assembly was put into place. Then the tailwheel doors were then added. There is still a long, long way to go before this replica is completed. None of the work is being finished to an airworthy standard but the group states that Whirlwind P7056 will be indistinguishable inside and out from the original. The project is at the Kent Battle of Britain Museum in Hawkinge and is displayed alongside recovered Whirlwind wreckage and the only two known surviving examples of the Rolls-Royce Peregrine engines that powered the type. Only 13 known Whirlwind drawings exist so to make this project as accurate as possible, all the talents of researchers, engineers, and CAD experts were brought together to look at the drawings, parts, photos, and manuals. All these resources then helped to create a CAD model via Solidworks software.



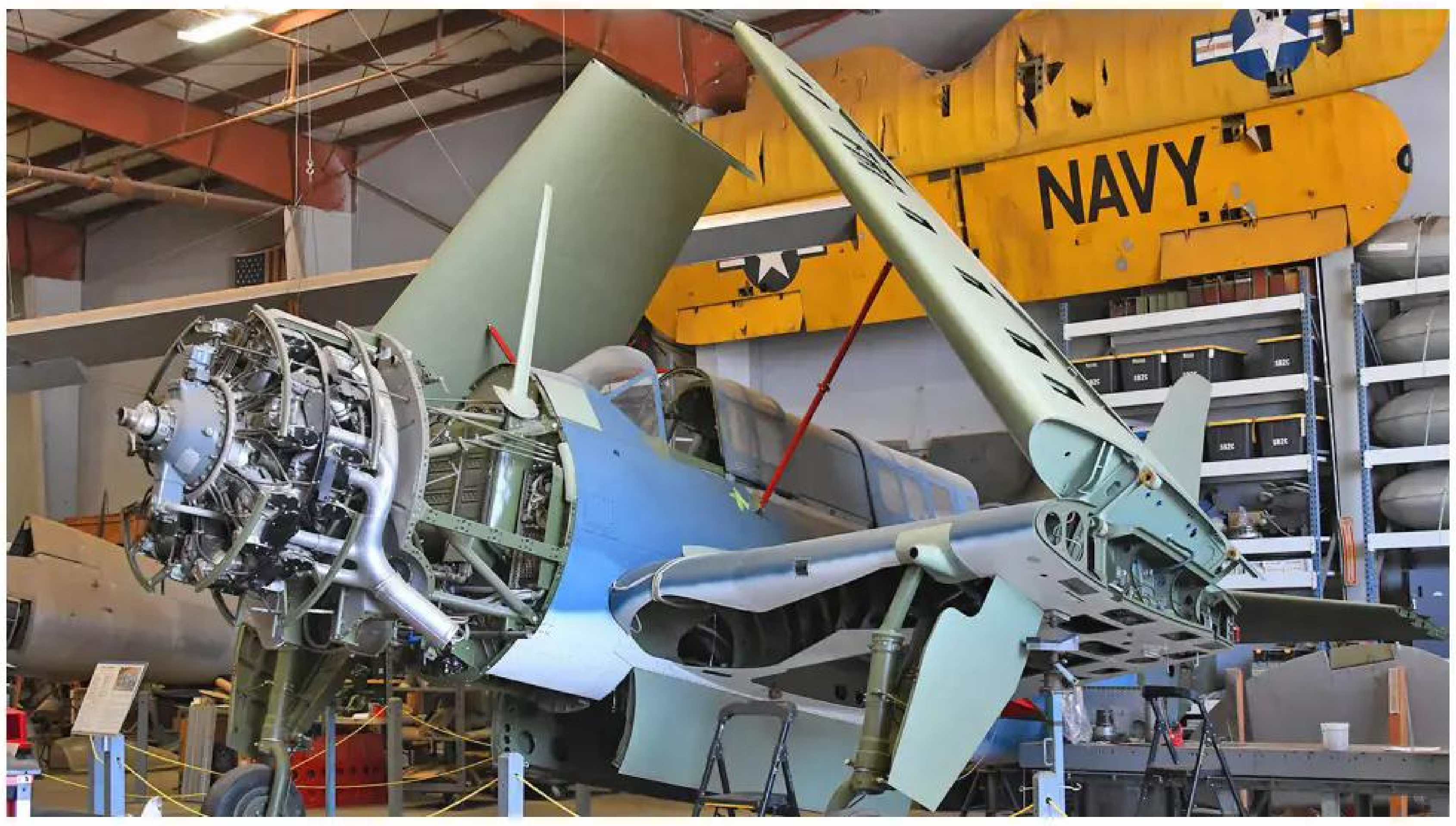
The rear fuselage with tailwheel installed mated to the main fuselage.



Stampe SV-4C G-AYGE in an embarrassing position.

STAMPE DOWN

On 20 September, Stampe SV-4C G-AYGE was coming in to land with three other similar aircraft from the Stampe Display Team at Lee-On-Solent. The other three landed without a problem but G-AYGE wound up on its nose with extensive damage to the cowl and left wing. The pilot was not injured.



The Yanks Helldiver with its wings installed for the first time.

HELLDIVER GETS ITS WINGS

"We have been doing a lot of work on the wings of the Helldiver, so we decided to mount them on the center section," stated Casey Wright at Yanks Air Museum. Other components were also added to the airframe at the same time. The aircraft is the only surviving SB2C-3 variant and is BuNo 19075/N4250Y and it was originally saved from a movie studio by Ed Maloney in 1963 before being sold to Yanks in 1987. "This is a long-term project," said Casey "but once we get a few more planes out of restoration we will turn our attention to the Helldiver."

Casey Wright with the SB2C-3.

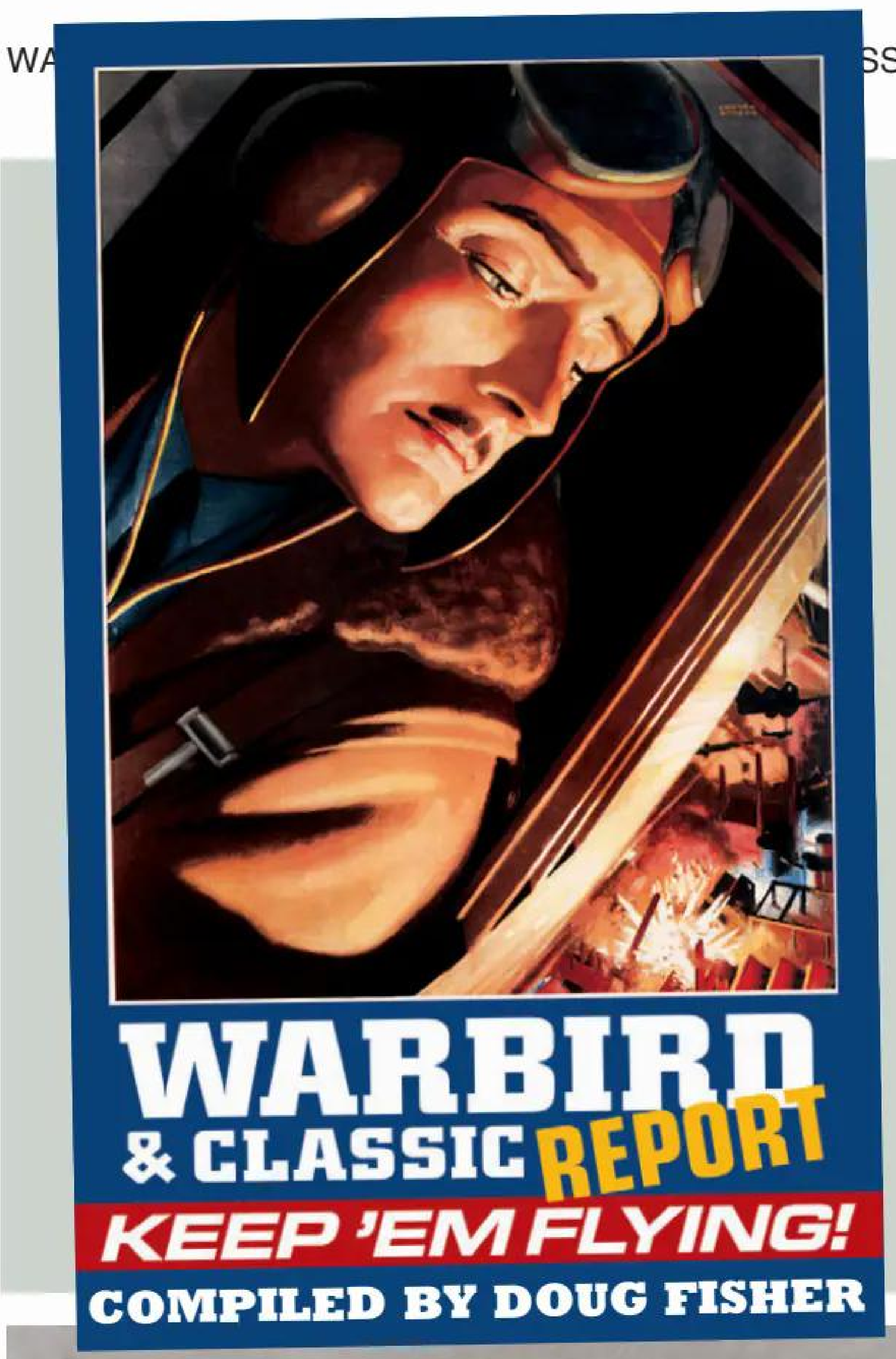
GossHawk
UNLIMITED

Vintage/Warbird Aircraft
Restoration & Maintenance
T-28, P-51, Fw 190, T-6, B-17, L-29, PB4Y-2, Me 262
Stinson V-77 and a wide variety of other aircraft

52 Years Aviation Mechanic Experience
20 Years with Champlin Fighter Museum

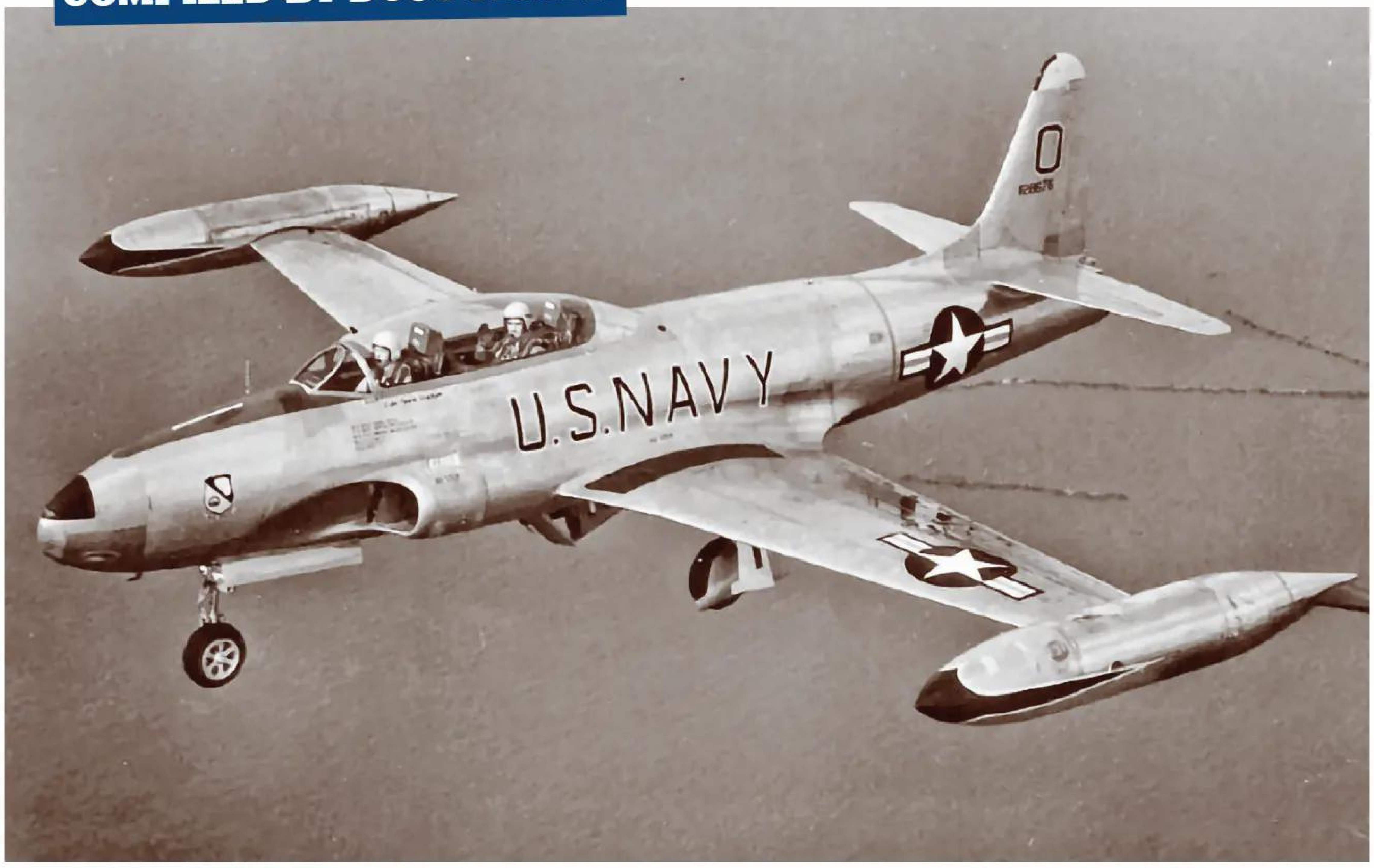
3184 N. Rockwell Ave.
Casa Grande, AZ 85122
(520) 423-2622

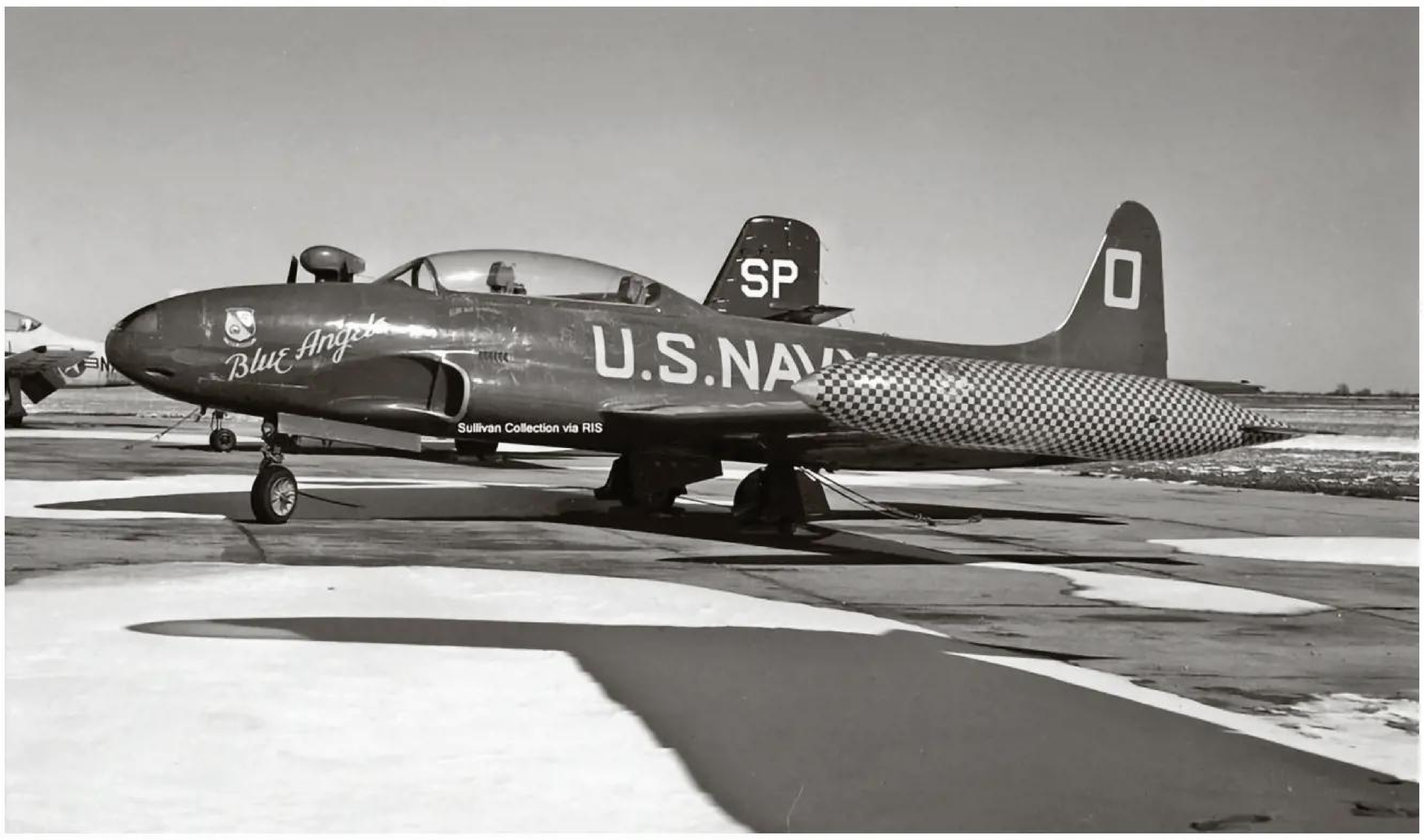
Dave Goss, President
www.gosshawkunlimited.com
Info@gosshawkunlimited.com



SHOOTING STAR MEETS THE BLUE ANGELS

BY KEITH CHARLOT


The Blue Angels operated three of the Lockheed jets including TO-2 Seastar BuNo 128676 that replaced the Angels final remaining Grumman F8F Bearcat. As can be seen, it had a natural metal finish but carried the "0" on the vertical and a Blue Angels crest on the nose. It would go through several different paint additons. (W.T. Larkins)


Sullivan Collection via RIS

By the time the second Seastar, BuNo 128676, had arrived the aircraft designation had been changed from TO-2 to TV-2. The aircraft was painted in the same colors as the Angels display aircraft and had the colorful checkerboard tip tanks along with the team's name in script on the nose. The final Seastar was BuNo 137955 and it had a number of paint changes, eliminating the checkerboard on the wing tanks with script that read "Naval Air Training Command." (W.T. Larkins)

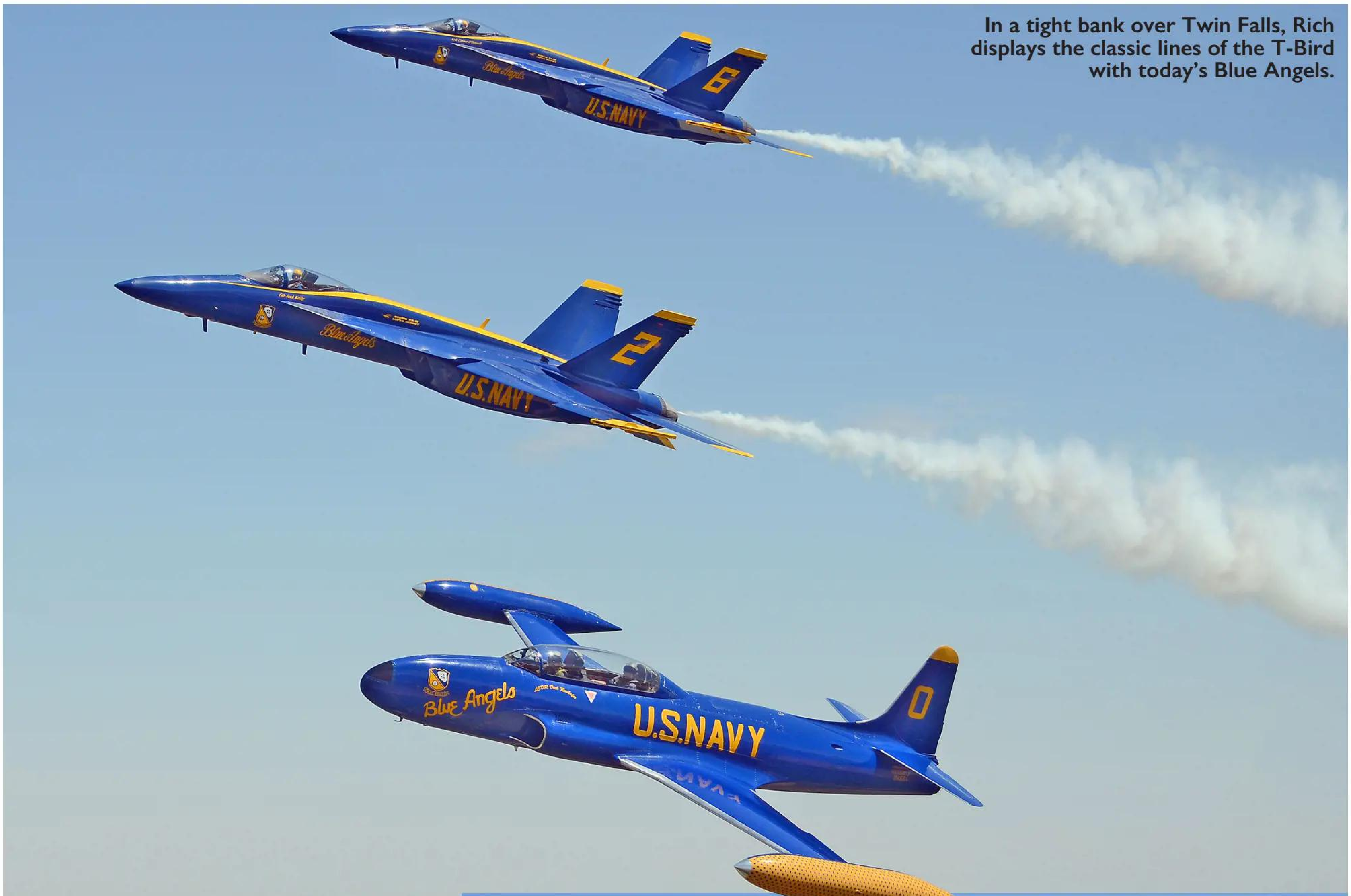
It is not an exaggeration when we say the Lockheed T-33 Shooting Star is the greatest jet trainer of all time. Tens of thousands of pilots were trained in the type around the world. Air National Guard pilots bemoaned the fact the T-Bird was phased out of service in 1987 for it had made a great "hack" for the fighter pilots. Easy to maintain and fly, there was really nothing that could replace the T-Bird in ANG service. Fortunately, a dedicated band of civilian pilots maintain and fly this greatest of all jet trainers and we have individuals like Greg Colyer and his "AceMaker" airshow act that put the T-Bird directly in front of hundreds of thousands of people every year to keep the history of this great plane alive.

This past August, I was able to put together a unique photo mission — a mission that took six-years to accomplish! Briefly stated, I wanted to put Richard Grinnell in his Blue Angels-painted T-Bird in formation with some of the F/A-18s flown by the Navy's famed Blue Angels. What a chance for an historic formation.

As most readers realize, getting such a mission together is difficult. It requires a lot of paperwork and depends on outside factors that include weather, airshow scheduling, and maintenance. However, on 14 August we managed to get all the stars aligned for the photographs on these pages.

Rich Grinnell is the president of Red Rock Warbirds based in Wendover, Utah. Rich's T-Bird was built in Canada under license to Canadair as a Silver Star Mk. 3. The jet went into Canadian service as RCAF 21479 and the powerplant is a Rolls-Royce Nene 10 rather than the Allison J33 utilized by Lockheed. Canadair built an impressive total of 656 CT-133s and many of these aircraft were supplied to NATO countries.

Rich's T-Bird immediately went into service with the Royal Canadian Navy and was operated by VU-32 at RCNAS Dartmouth for a variety of duties. During 1965, the T-Bird was

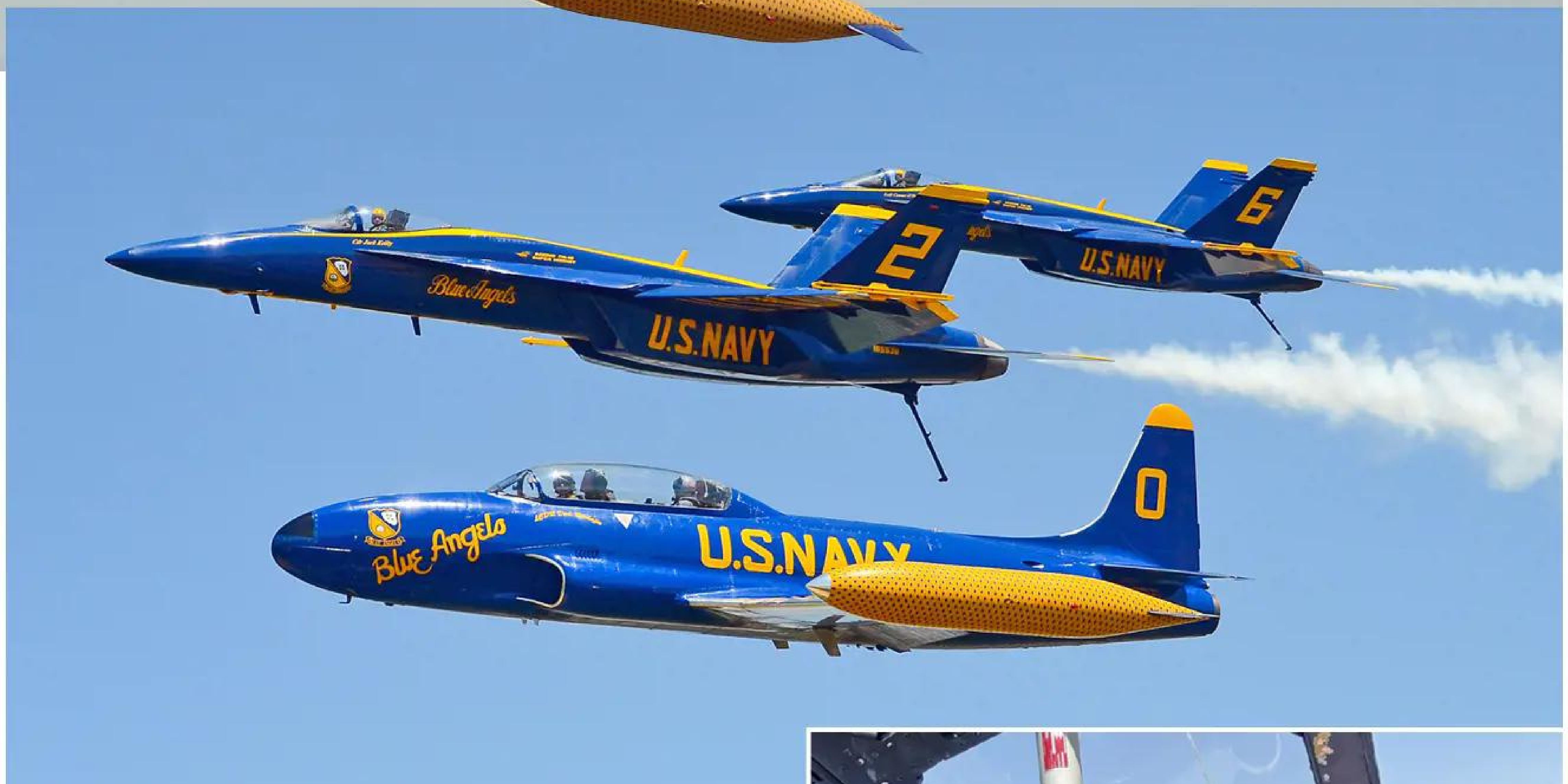


In a tight bank over Twin Falls, Rich displays the classic lines of the T-Bird with today's Blue Angels.

put up for disposal along with a number of similar aircraft. It was sold surplus in the USA where it became N333MJ. While operating in the States, it was owned and flown by a number of well-known Warbird pilots and even had a role in the film *The Right Stuff.*

Always having an interest in the T-33, Rich was fortunate enough to be mentored by the late, great Kay Eckhardt who was truly the fount of all knowledge when it came to owning, maintaining, and flying Lockheed's classic jet. After Kay's untimely passing, Rich was able to acquire N333MJ from the estate in 2021. Since then, Rich has been extremely active on the Warbird and airshow circuit and the sight of the bright blue aircraft is truly appreciated by airshow visitors.

As I mentioned, coordination for the shoot was difficult. Everyone involved was fully cooperative but it was just a matter of putting it all together. That finally happened at this year's Twin Falls Magic Valley Airshow. I had lots of phone calls, emails, and zooms with all participants. The Blue Angels pilots in the F/A-18E Super Hornets would be Cmdr. Thomas Zimmerman in Angels #2 and L/Cmdr. Connor O'Donnell in Angels #6. I could not ask for a better and more cooperative pair of aviators that wanted to get this historic mission done. For a camera plane I had J.P. O'Donnell in his Bonanza ready for the mission and he did a great job.



Hooks down and smoke on, the Angels join with Rich.

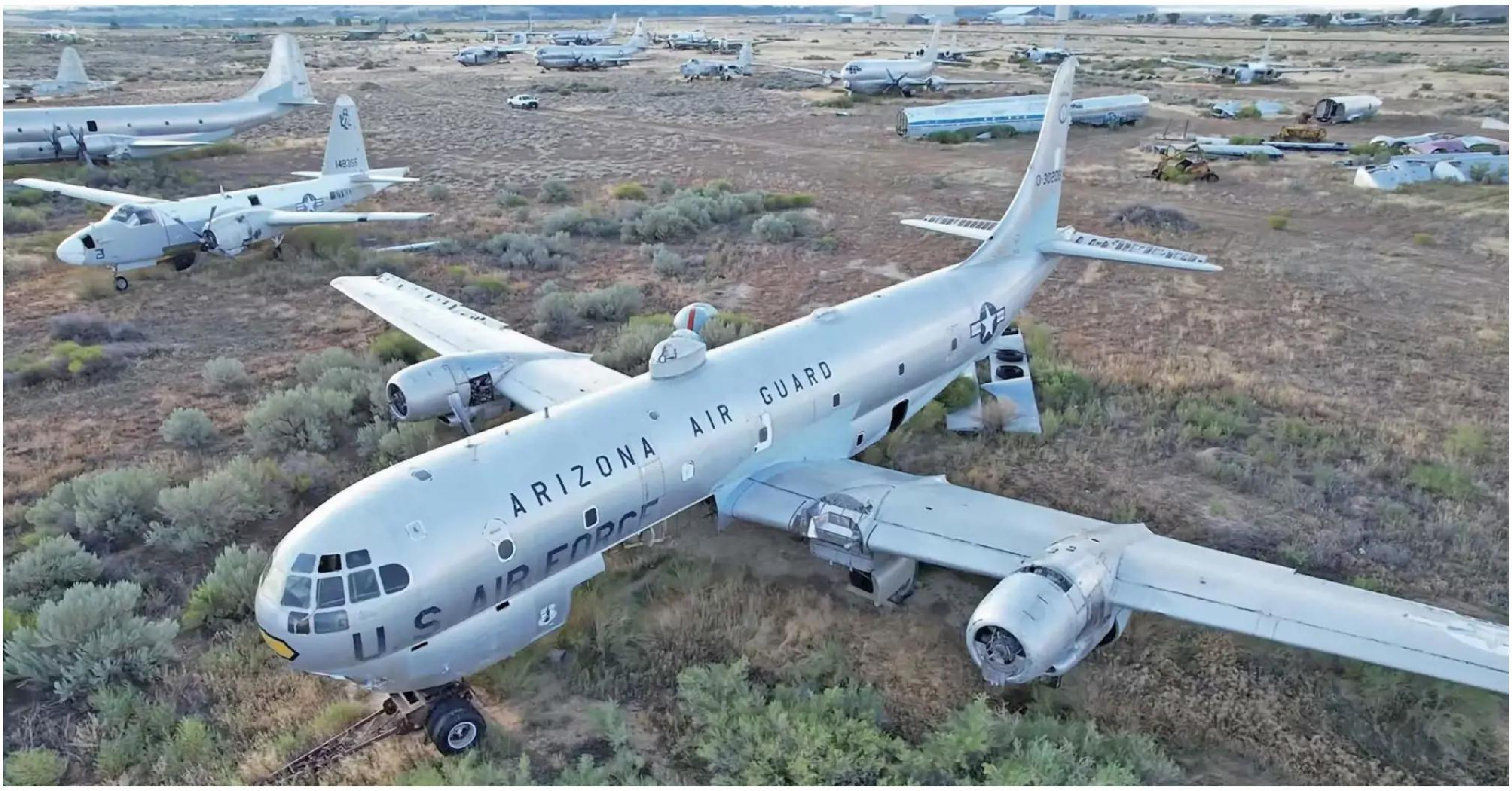
For the flight, Rich would be in the lead and he would be joined by airshow director Jim O'Donnell in the backseat for the flight of a life time. We had established a horse track orbit near the airfield and Rich slid into position on the right side of the Bonanza. Then came the Hornets and it was a thrilling sight to see the F/A-18Es lock into formation. As we did our race track, we had smoke on/off, and tail hooks up and down.

Of course, I always want these flights to go on for as long as possible but we had a very definite time slot and I tried to take as many views as possible. I really want to thank everyone involved in this historic flight of capturing Blue Angel 0 with Blue Angels 2 and 6.

Mission over, Rich Grinnell and Jim O'Donnell pose for a photo.

NAVAL AIR TRAINING COMMAND
BLUE ANGELS
Cdr Jack Kelly
Blue Angels
BLUE ANGELS
Blue Angels
U.

6
Blue Angels
U.S.NAVY
165665
2
U.S.NAVY
165538
0
S.NAVY
LOCKHEED MK III
NX333MJ
21456



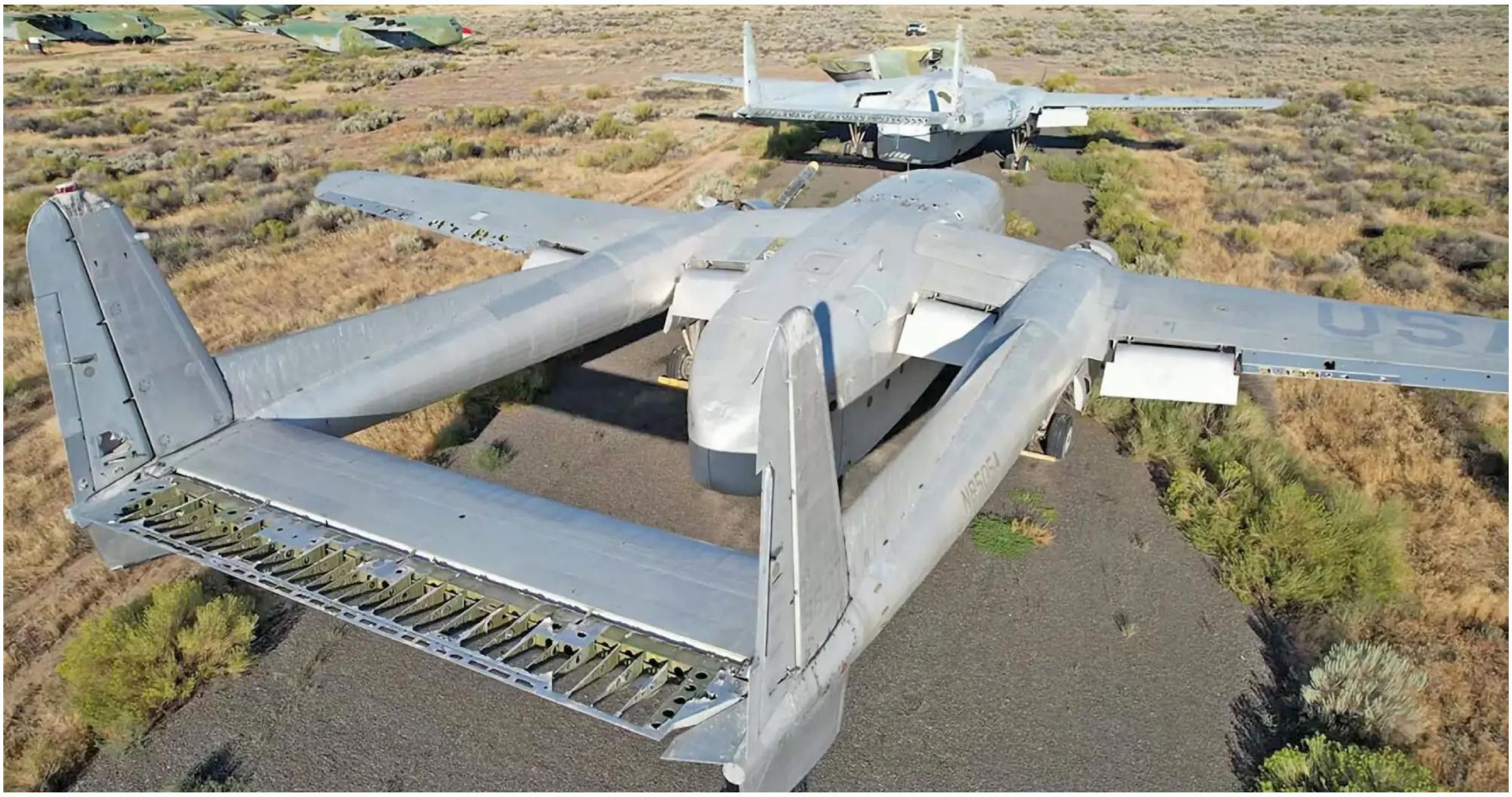
C-97s, Neptunes, and other doomed aircraft at Greybull.

BIG HORN MASSACRE

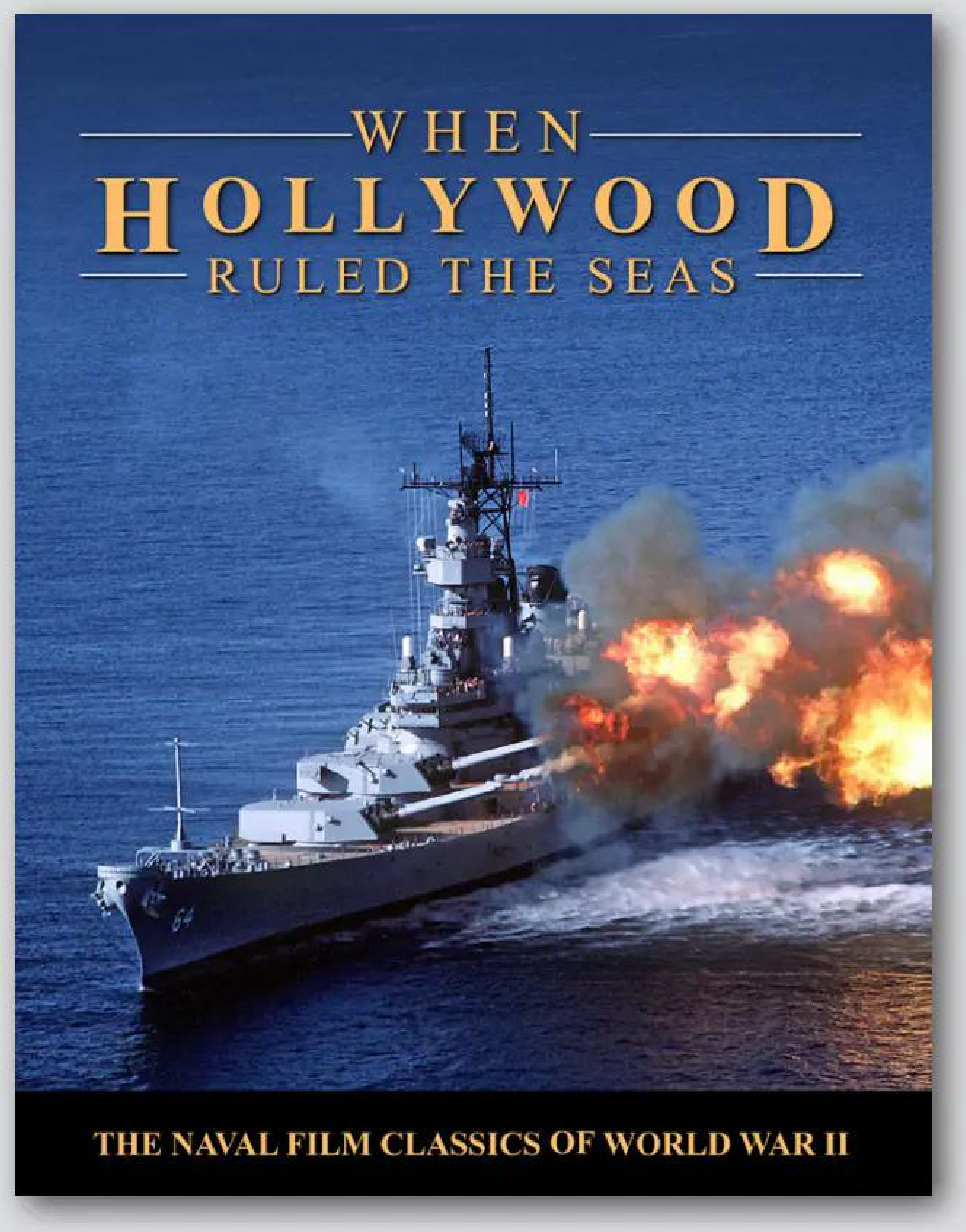
As we went to press, we were notified of what could be potentially the largest destruction of surviving "Big Props" in the world. The aircraft were mainly part of the once mighty Hawkins & Powers Aviation fleet located at Greybull, Wyoming. Readers will recall that when H&P was forced to close its doors after the government refused to utilize "antique" fire-bombers, many of the aircraft were auctioned off in 2005. Some of the planes were eventually acquired by Harold Sheppard who added a few more to the collection — rare Martin 4*0*4 airliners, the last of their type.

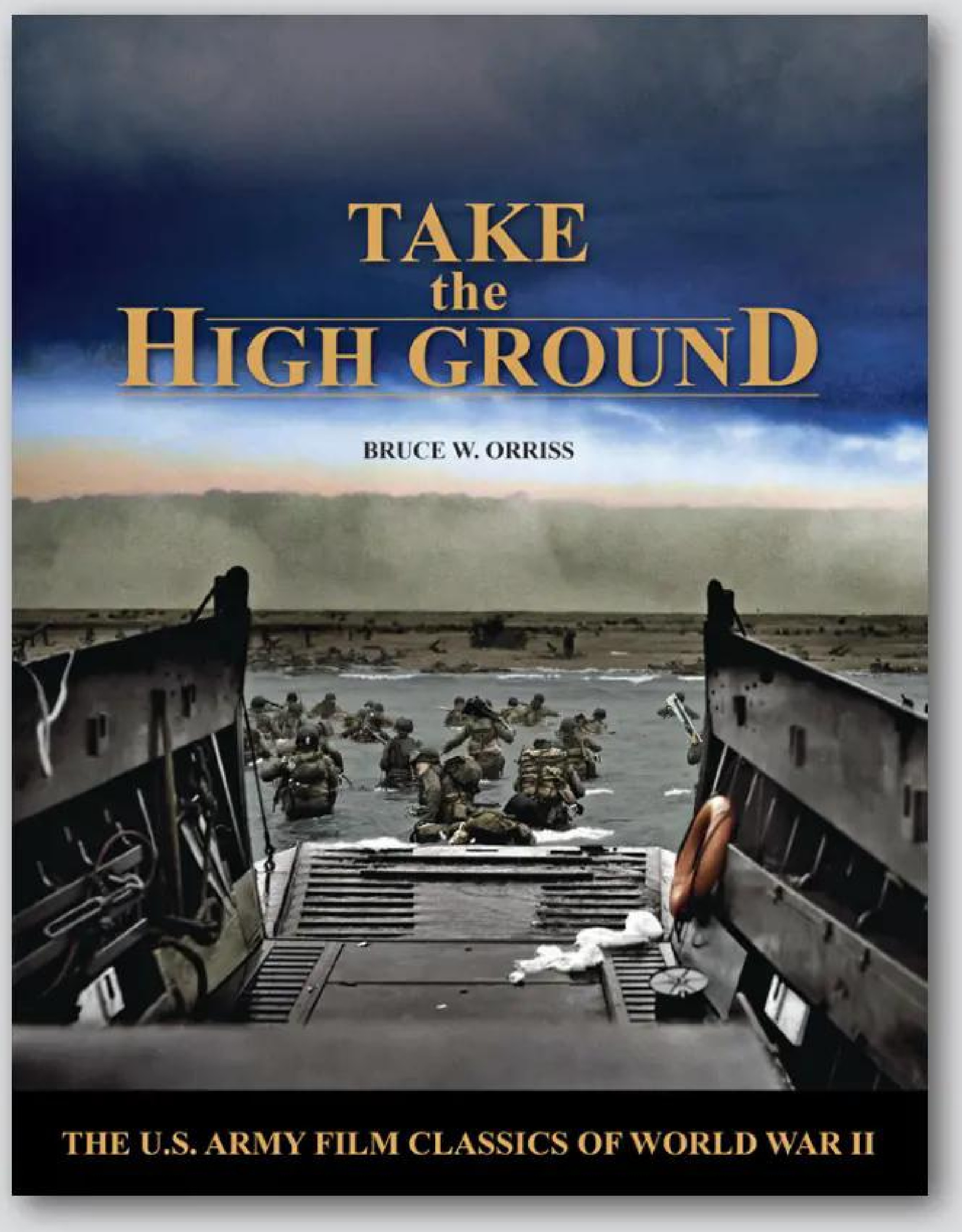
Harold has not been paying his rent to secure what is basically wasteland and Big Horn County filed a $543,600 storage bill and thus obtained 16 aircraft that range from Boeing C-97s, to C-119s, to C-82 Packets, and some Lockheed Neptunes. One county bureaucrat stated "times are tough for the county, and anything helps." Well, the bureaucrats may start thinking about reducing their overinflated salaries. It seems at press time bids were ranging from $25 on up. "Aluminum is doing fairly well on the recyclable end of things, so lots of scrappers are interested in the aluminum," stated the bureaucrat. It appears the bureaucrats were sitting by their computers and salivating as each bid came in. There was excitement when the bid on a Fairchild C-119 went from $100 to $150. Better tighten those belts, boys.

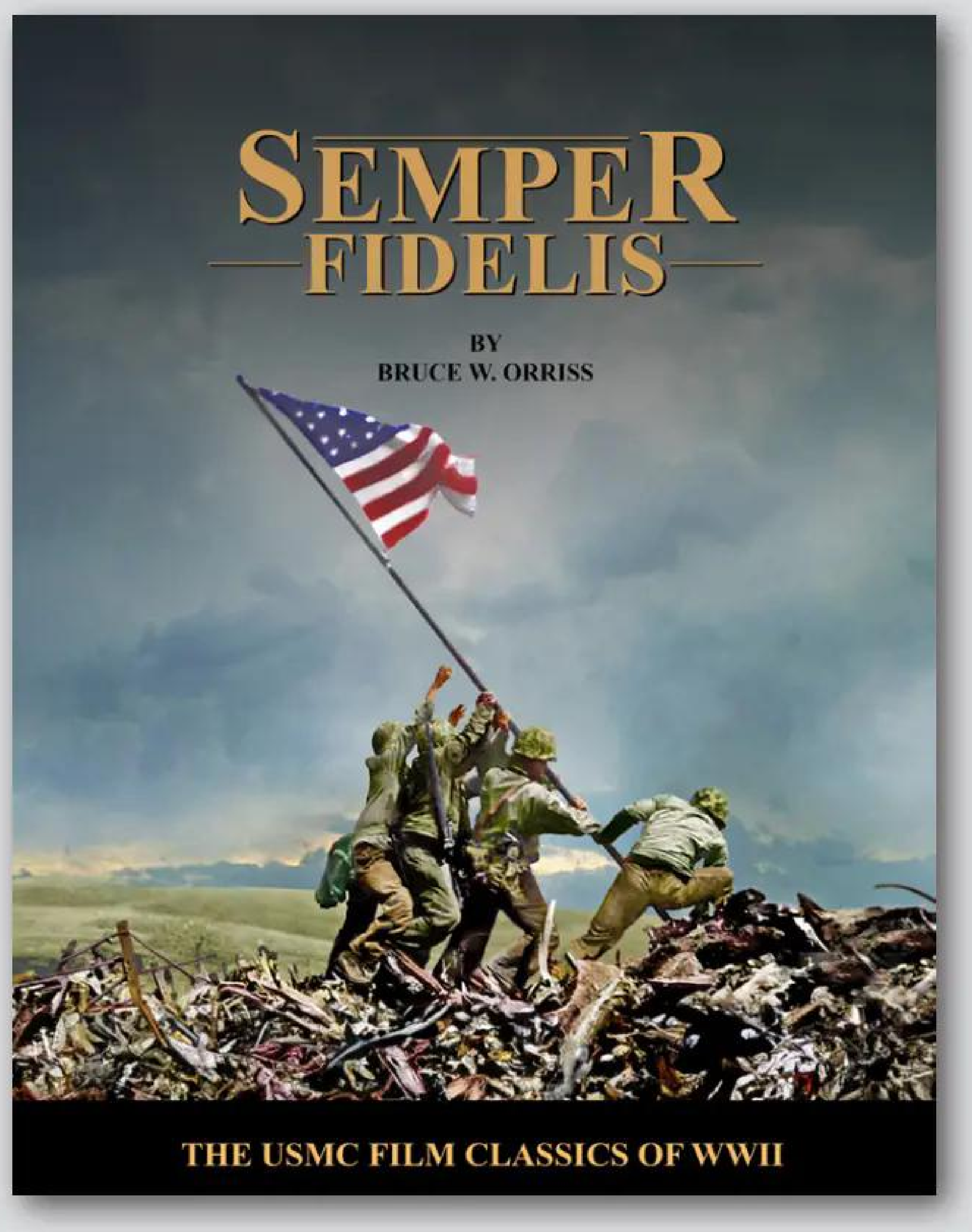
With the demise of H&P there is nothing — absolutely nothing — going on in Greybull. If the political powers had any sense, they would clean the area up a bit and then offer tours to enthusiasts who would gladly pay more than the scrap on a C-119 to visit and photograph this elephants' graveyard. Every year, the airport gets requests from hundreds of enthusiasts — many foreign — and this could be a boost to the local economy. I doubt if we will have very good news in the next issue. **AC**



It is doubtful if either of the C-119s will survive. One of the aircraft was, briefly, the only Warbird C-119 on the airshow circuit.


WHEN HOLLYWOOD RULED THE SEAS
THE NAVAL FILM CLASSICS OF WORLD WAR II


TAKE the HIGH GROUND
BRUCE W. ORRISS
THE U.S. ARMY FILM CLASSICS OF WORLD WAR II


SEMPER FIDELIS
BY BRUCE W. ORRISS
THE USMC FILM CLASSICS OF WWII

GREAT MOVIES OF THE US NAVY, US ARMY, US MARINE CORPS!

THEY WERE EXPENDABLE
Robert MONTGOMERY
John WAYNE
SUBMARINE RAIDER
Das Boot
Cary GRANT
John GARFIELD
DESTINATION TOKYO

THE RED BALL EXPRESS
THE BIG RED ONE
Die unbesiegbare Erste
THE TANKS ARE COMING
STEVE COCHRAN
A WALK IN THE SUN
DANA ANDREWS
GUADALCANAL DIARY
WAKE ISLAND
PRIDE OF THE MARINES
SANDS OF IWO JIMA
JOHN WAYNE

Film historian Bruce Orriss has added three volumes on Hollywood films dedicated to the USN, USA, and USMC.

Filled with facts and photos, these books will serve as excellent companions to the author's earlier ground-breaking series on Hollywood movies devoted to aviation.

Well-printed and reasonably priced, this trio provides an excellent guide for the military enthusiast with lots of little-known information.

BUY ALL THREE AND SAVE $10! • **CALL 818-700-6868 FOR IMMEDIATE SERVICE**

Challenge AVIATION BOOK CLUB

QUANTITY	TITLE NAME	PRICE EACH	TOTAL DUE
	WHEN HOLLYWOOD RULED THE SEAS	$30	
	TAKE THE HIGH GROUND	$30	
	SEMPER FIDELIS	$30	
	BUY ALL THREE AND SAVE $10	$80	
		MERCHANDISE TOTAL	
		CA Residents add 9% Sales Tax	
		TOTAL DUE (U.S. Funds Only)	

(Domestic Postage is included in the purchase price. Canadian and foreign orders please call 1-818-700-6868 or email *ed@challengeweb.com* for additional postage cost by title.)

Name ______________________________

Address ______________________________

City ______________________ State ________ Zip + 4 ________

Telephone Number (in the event we need to contact you): ______________________

E-mail address: ______________________________

Payment Enclosed (Orders must be prepaid in U.S. funds)

○ Check ○ Money Order ○ Credit Card

Card # ______________________________

Expiration Date ________________ CVE# ________

Signature ______________________________

SEND TO:

CHALLENGE ABC
9800-D Topanga Canyon Blvd.
#368
Chatsworth, CA 91311

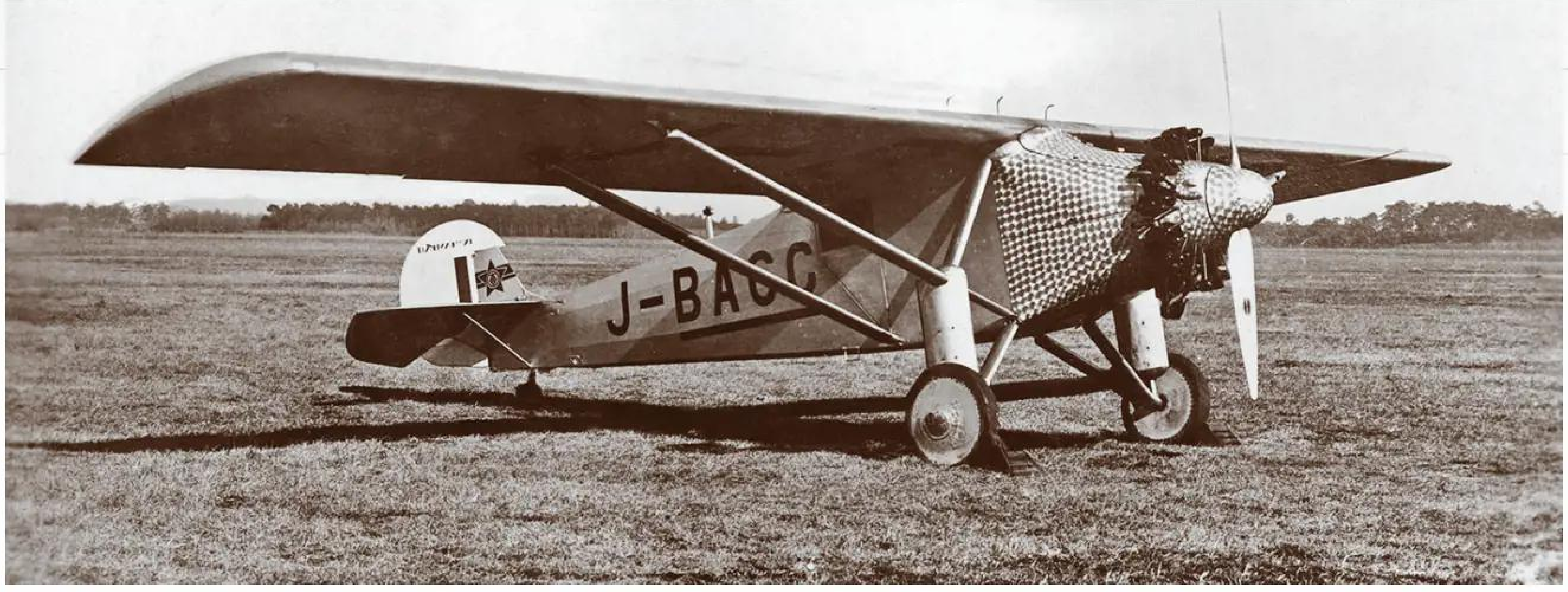
OR, ORDER AT:

1-818-700-6868

LOG ENTRIES
BY MARK BINGHAM

GOING THE DISTANCE

BY PURCHASING AN EXACT COPY OF THE RYAN SPIRIT OF ST. LOUIS, THE JAPANESE HOPED TO SET AVIATION RECORDS. HOWEVER, IT DID NOT WORK EXACTLY AS PLANNED



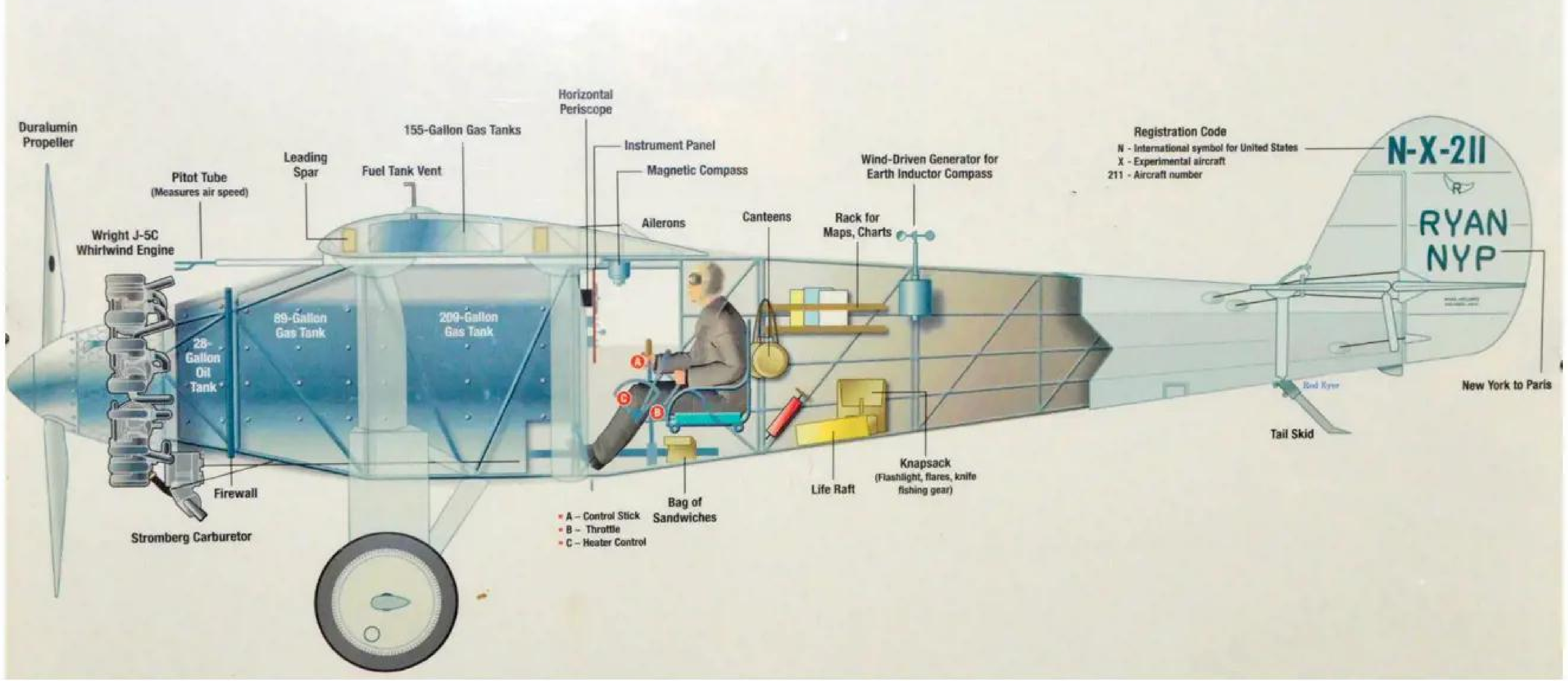
With the Ryan NYP-2, Japan hoped to enter a new age of technology and showcase Japanese achievements via long-distance flights.

The successful crossing of the Atlantic Ocean by Charles A. Lindbergh in May 1927 emboldened the spirit of aviators around the globe to conquer new aviation feats and records, including the Japanese. Riding on a surge of nationalism with recent military victories and annexations, the Japanese were ready to conquer the Pacific Ocean. Similar to the Raymond Orteig (NYC hotelier) $25,000 prize for crossing the Atlantic, a leading Japanese newspaper publisher announced a $25,000 prize for the first non-stop flight from Japan to the United States. Sponsors of the contest promptly contacted Ryan Airlines Inc. to duplicate Lindbergh's *Spirit of St. Louis* aircraft for the Pacific crossing.

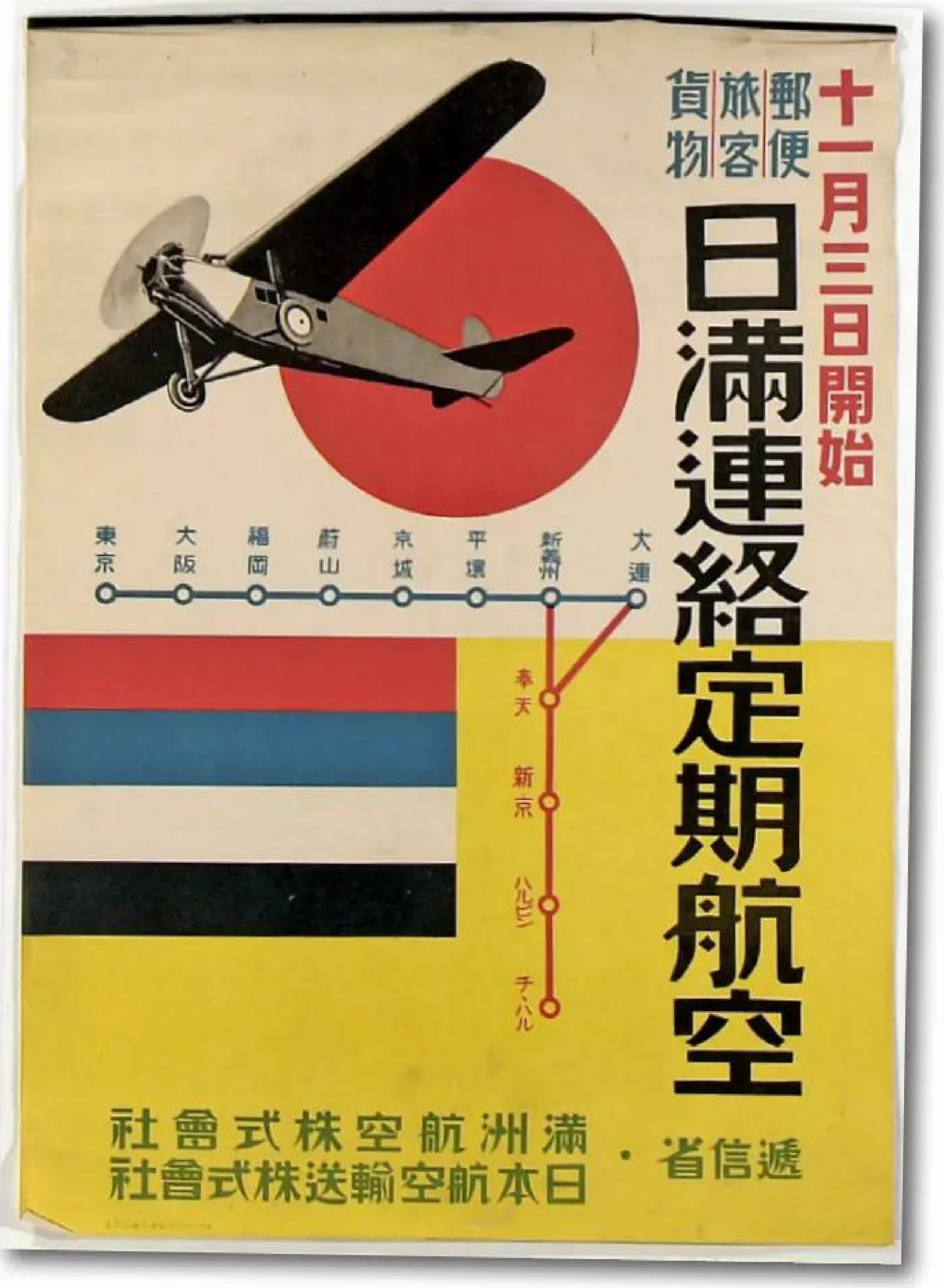
Lindbergh's specially designed aircraft was a modification of the very successful M-1 series of aircraft that Ryan Airlines Inc. built for airmail routes and passenger flights. Lindbergh's aircraft was designated as NYP-1, for the New York to Paris flight, and named the *Spirit of St. Louis* in honor of his collection of businessmen sponsors from St. Louis, Missouri. With a wingspan of 46 feet, NYP-1 held over 400 gallons of fuel in three separate fuel tanks to allow 40 hours of flight. The Japanese plane was designated as NYP-2, was Ryan serial number 36, and carried the Japanese civil registration of J-BACC. NYP-2 was painted silver with black lettering and the rudder was painted with *Tonichi Daimai No. 11*, which was an abbreviation of the names of the newspapers in Tokyo (*Asashi Shimbun* — Rising Sun News) and Osaka (*Mainichi Shimbun* — Everyday News) and represented the eleventh airplane purchased jointly by these newspapers. In all respects, NYP-2 was an exact duplicate of NYP-1.

Ryan NYP-2 was ordered by the Japanese in the summer of 1927. Flight testing (which was probably limited) was undertaken by Ryan pilot Red Harrigan who commented, "I don't like its handling characteristics." It is unclear if anything was done about this. The NYP-2 was dismantled, packed into wooden crates, and loaded aboard a freighter bound for Yokohama along with a newly-designed Ryan B-1 Brougham (serial/registration not known) passenger aircraft that was ordered at the same time. From Yokohama, the airplanes were shipped by rail to Tokorozawa Airfield where they were reassembled under the supervision of a Ryan mechanic.

Fumio Habuto was the Japanese pilot selected to fly NYP-2. Habuto was


Duralumin Propeller
Pitot Tube (Measures air speed)
Wright J-5C Whirlwind Engine
Leading Spar
Fuel Tank Vent
155-Gallon Gas Tanks
Horizontal Periscope
Instrument Panel
Magnetic Compass
Ailerons
Canteens
Rack for Maps, Charts
Wind-Driven Generator for Earth Inductor Compass
Registration Code
N - International symbol for United States
X - Experimental aircraft
211 - Aircraft number
N-X-211
RYAN NYP
New York to Paris
Tail Skid
89-Gallon Gas Tank
209-Gallon Gas Tank
28-Gallon Oil Tank
Firewall
Stromberg Carburetor
A - Control Stick
B - Throttle
C - Heater Control
Bag of Sandwiches
Life Raft
Knapsack (Flashlight, flares, knife fishing gear)

The Japanese wanted to have the NYP-2 be a virtual exact copy of the NYP. The drawing shows the configuration of the NYP and how it was built around the tall and lanky Lindbergh. The smaller Japanese pilot had greater difficulties in handling the aircraft with its lack of forward visibility.


十一月三日開始
郵便
旅客
貨物
日満連絡定期航空
東京
大阪
福岡
蔚山
京城
平壌
新義州
大連
奉天
新京
ハルビン
チゝハル
遞信省・
滿洲航空株式會社
日本航空輸送株式會社

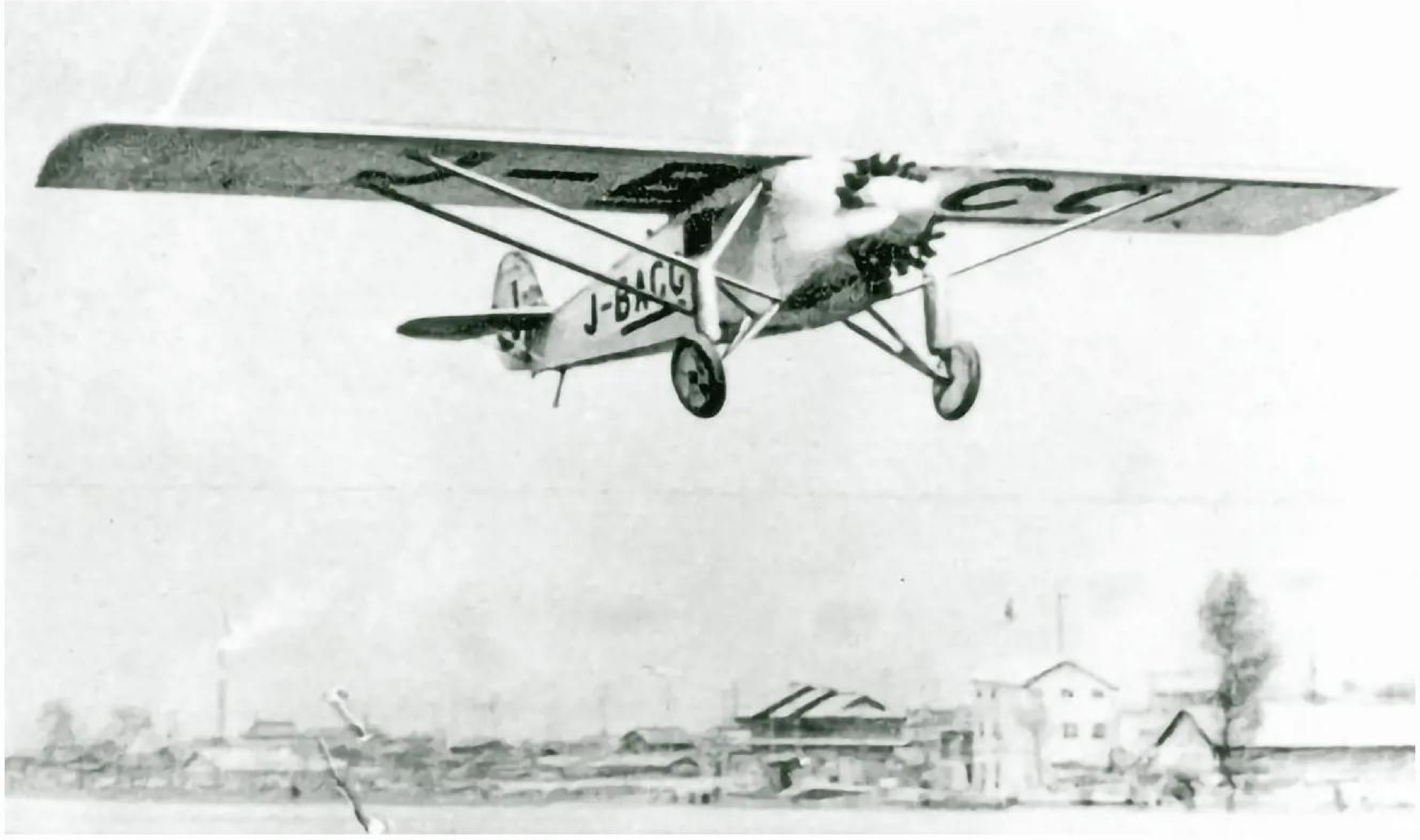
Japanese poster from the time period extolling aviation.

the chief pilot for *Mainichi Shimbun* newspaper and had been with the company since 1923. He had received his flight training at the Tokorozawa Aviation School and had been a test pilot for the Japanese Army. From the very first flight of NYP-2, Habuto had problems with the lack of forward visibility. Lindbergh had conquered this problem by developing his peripheral vision. As a backup, a Ryan mechanic designed a periscope that allowed him to see in front of the large fuel tanks that blocked all forward vision beyond the instrument panel. It must be remembered that NYP-1 had pretty much just one purpose — fly straight ahead until reaching Europe. Habuto also tried to develop his peripheral vision by riding local trains on curving routes. "I tried to keep in mind the entire outside scene," he would note in the newspaper, "as I viewed in fragments, laterally, through the windows."

Another unexpected problem for NYP-2 arose from the Japanese Aviation Bureau for Airworthiness. The Bureau imposed the restriction that NYP-2 could carry only enough fuel for 20 hours of flight! This bit of bureaucratic insanity would spell doom for the ambitious record attempt.

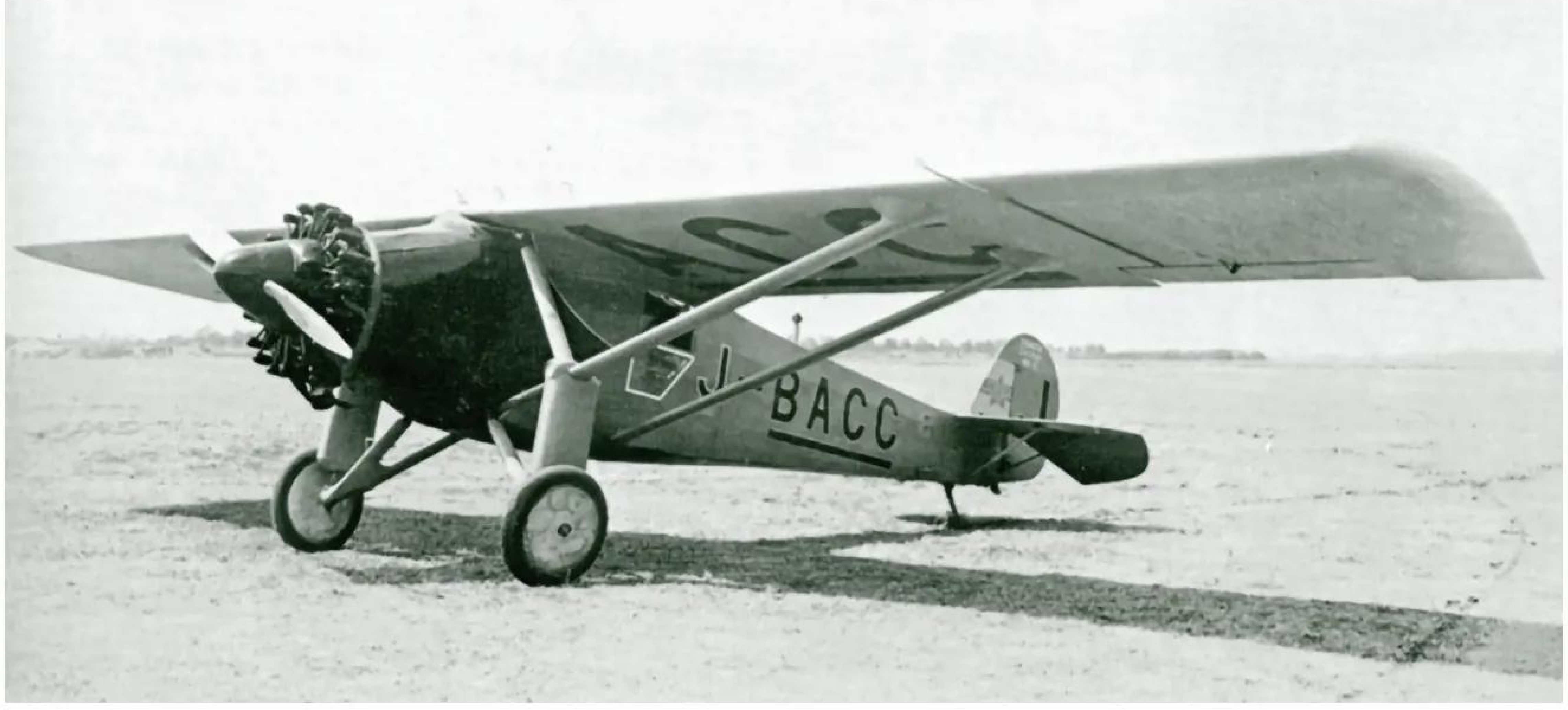
Unfortunately, the Japanese *Spirit of St. Louis* never made a Pacific crossing. The Atlantic crossing was 3600 miles, whereas the Pacific crossing would be at least two times further, with only miniscule remote islands as reference points versus continental land masses. The lack of accurate weather forecasting over such a vast expanse made the risks insurmountable. The fuel quantity restriction by the Japanese Aviation Bureau for Airworthiness Certification made the crossing impossible.

In order to "save face", *Mainichi Shimbun* proposed a record endurance flight in NYP-2. The flight was to start at sunrise from Hamamatsu to Tokorozawa and then on to Osaka, a distance of 1350 miles, with an estimated flying time of 14 hours. Female Japanese hotel workers had decorated the wicker pilot's seat with a variety of fragrant flowers to speed Habuto on his way. The landing was planned at sunset. Just before sunrise on 23 April 1928, Habuto started the Wright J-5C engine and taxied to the end of the runway. Habuto powered up and NYP-2 lifted off after 1000 feet of runway passed. He then circled over the airport and flew on to Hamamatsu, then past Mt. Fuji, then over Tokorozawa Airfield, and then on to Tokyo, where he flew over the *Mainichi Shimbun* newspaper building and employees crowded the rooftop while others hung out of windows and waved at the aviator. After five hours of flight, the weather over southern Japan turned turbulent (weather forecasting in Japan left a lot to be desired at that time period). Habuto descended below the clouds and continued flying over the

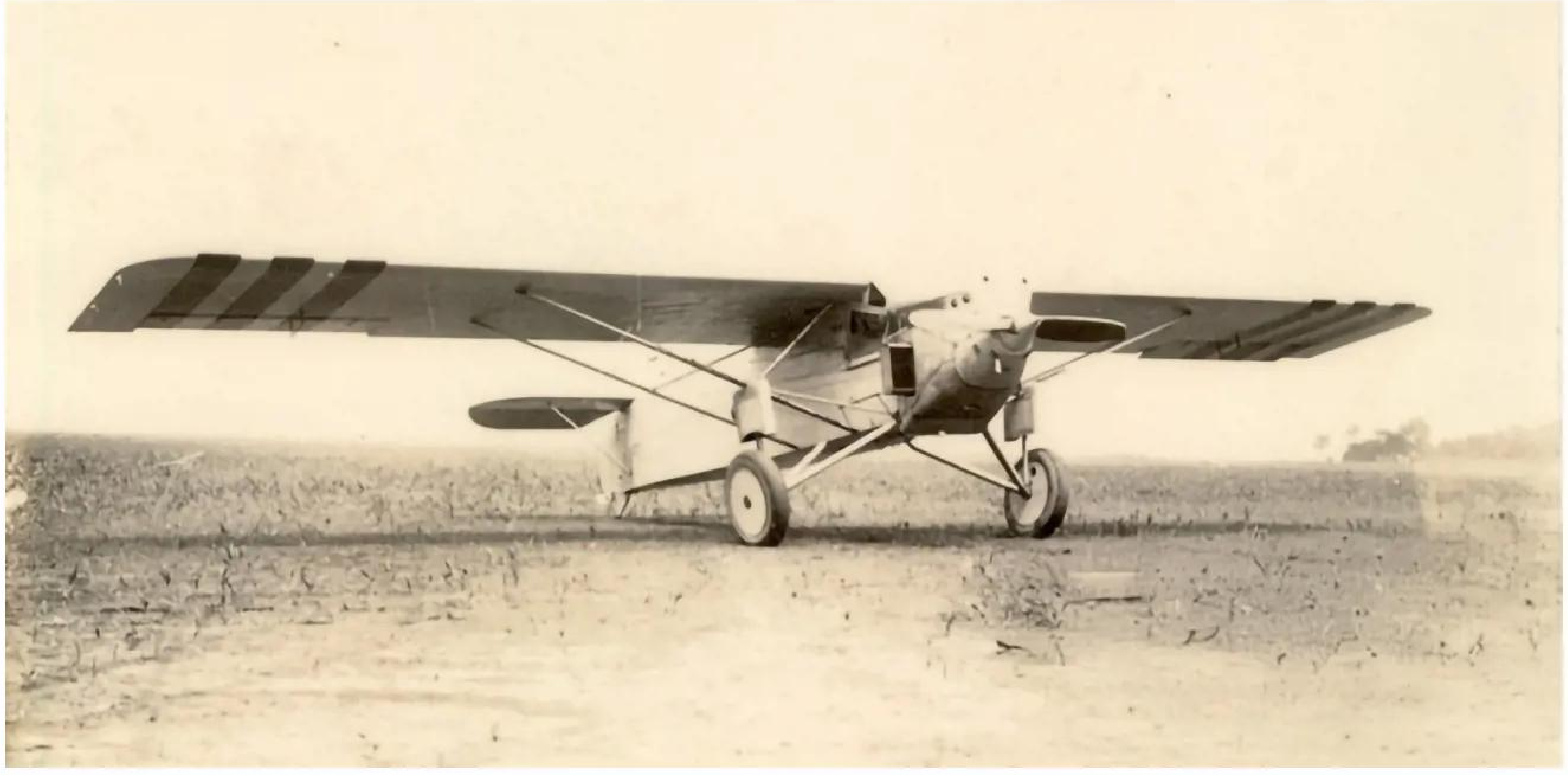


A drawing showing the NYP-1 in flight. The aircraft achieved only limited flying time.

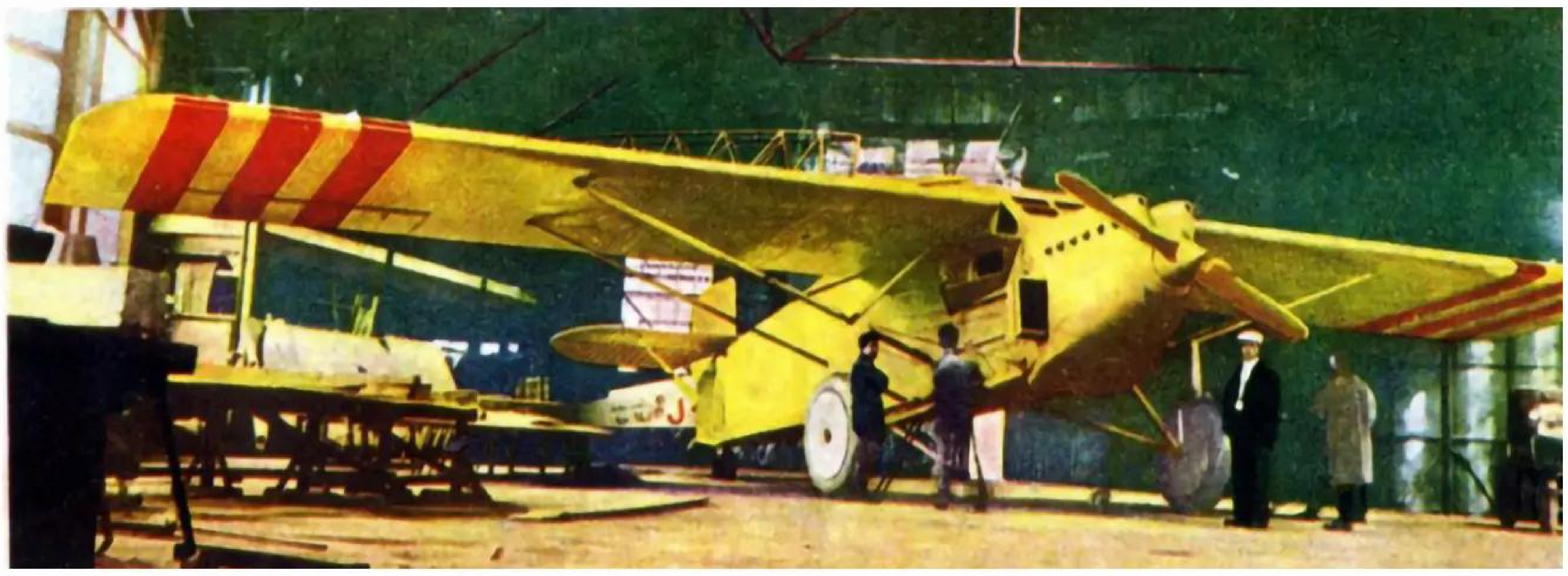
Along with the NYP-2, the Japanese ordered a Ryan Brougham, similar to the aircraft seen in this photograph with Charles Lindbergh. It is not known what happened to the Japanese Brougham.



The NYP-2 was rebuilt but the modifications did not improve the aircraft. It was repainted with a light blue fuselage, brown forward section, and silver wings.

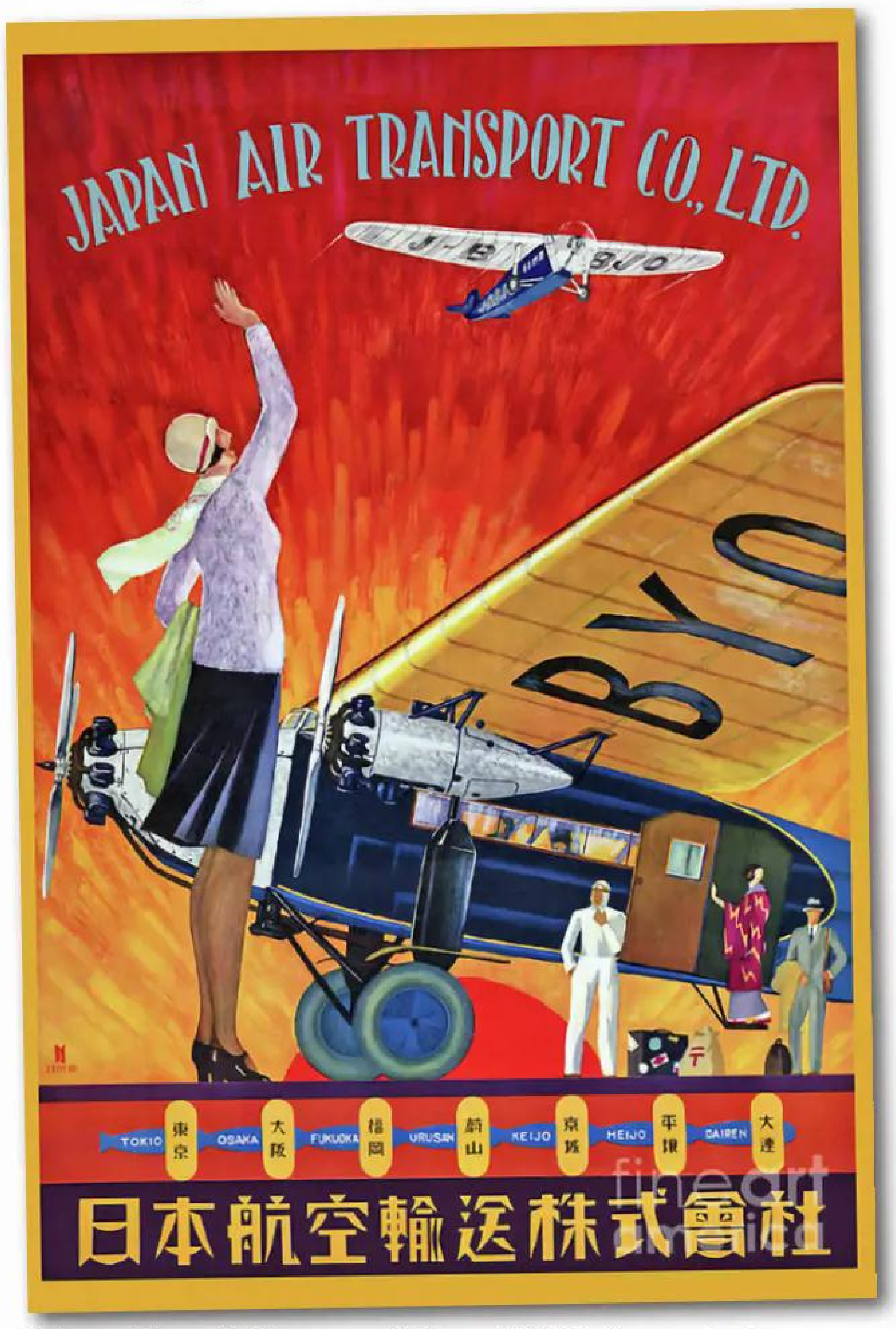


The K-12 was built using twice-scaled plans (with modifications) for the NYP-2. It was pretty much a failure.



Postcard showing the K-12 at the factory.

city of Hiroshima where he dropped quite low to avoid incoming rain. It was then on to Osaka, where he touched down with a few bounces exactly at sundown. The endurance flight lasted 13 hours, 23 minutes, covering a distance of 1300 miles at an average speed of 97 mph. Habuto was hailed as the "Japanese Lindbergh" and he was awarded a Transportation Minister Prize and a Japanese Aviation Association Prize for setting a new nonstop endurance flight record in Japan.



After the failure of the NYP-2 and the K-12, the Japanese began buying western aviation technology in order to develop their standing in the world. This attractive poster for Japan Air Transport shows single and tri-motor Fokkers in use.

Soon after the endurance flight, NYP-2 was modified to improve the forward visibility by removing a forward fuel tank, replacing it with an elevated pilot seat. Some of the problems could have stemmed from the Japanese pilot's small stature when compared to the tall and lanky Lindbergh. Ryan had pretty much built the cockpit around Lindbergh. The modifications were not satisfactory and test flights documented serious stability issues. NYP-2 was damaged after one such landing, the airplane was repaired and designated "crew trainer" and this probably meant that it was utilized to train student mechanics.

When it was clear that NYP-2 would not make a Pacific crossing, the Teikoku Aviation Association raised funds to build a twice-the-size scaled-up version of NYP-2 to be flown along a northern course of 5000 miles from Japan to the United States. The scaled-up version went into construction in the fall of 1927 at the Kawanishi Aircraft Works of Osaka and was designated as K-12 *Nichi-Bei-Go* ("Japanese-US Model"). Unlike the NYP with its welded steel tube fuselage, the K-12 would be built entirely from wood. It had a wingspan of 62 feet, 6 inches and was powered by a Kawasaki-licensed and produced BWM Type IV V-12 water-cooled, inline engine. Completed in May 1928 (supposedly the scaled-up design was so closely copied that a shipping dent in the cowl of the NYP-2 was duplicated), the K-12 was the largest single-engine landplane produced in Japan, with a weight of 12,125 pounds. The K-12 never left its home airport. The bulk of the airplane was too much for the engine, which was claimed to produce 500-hp, but realistically may have only produced 250-hp at 1460-rpm. The aircraft could reach a flight height of only 500 feet. In 1930, the K-12 was suspended from the rafters over the assembly shop of Kawanishi as a reminder to workers to not build a special-purpose airplane. (It should be noted that some records indicate two K-12s were built and it is presumed that the K12, whether one or two, was destroyed in American B-29 bombing raids.)

Years later, NYP-2 was restored to its original configuration but was not used after the Japanese-Chinese incidents broke out in 1931. After the start of WWII, Habuto noted that the NYP-2 was put in storage at the *Mainichi Shimbun* hangar at the Tokyo airport. However, he kept all the records for the aircraft in his home. Sadly, his home was incinerated during one of the late war B-29 fire bomb raids. Following the unconditional Japanese surrender on 2 September 1945 aboard the battleship *Missouri*, Japan was not permitted to have any airworthy aircraft. American occupation forces destroyed NYP-2 with a bulldozer. NYP-2 had only logged a total 120 hours of flight time. Habuto would state, "The glorious Ryan, imported from America as Japan was about to enter a new age of international affairs, regretfully could not accomplish more for civil aviation here." An ignominious end to an unusual historic aircraft. **AC**

GEORGIA
WORLD WAR II
Heritage Trail

GEORGIA WORLD WAR II
AVIATION SITES

GEORGIA AVIATION HALL OF FAME INDUCTEES

Discover Georgia's World War II aviation legacy through inspiring stories and exhibits, specialized tours, content experts, and historic sites, while also experiencing the beauty and culture of Georgia.

COMMEMORATIVE AIR FORCE AIRBASE GEORGIA

Experience the power and legacy of WWII aviation at Airbase Georgia. Located near Atlanta, this working museum lets you see, touch, and even fly in restored warbirds like the P-51D Mustang and rare SBD Dauntless. Visitors can witness active restorations and learn about the heroes who flew these iconic aircraft. It's more than a museum—it's living history in motion. After your visit, explore Peachtree City's 100-mile golf cart path network, dine in local restaurants, or relax at a craft brewery. ***airbasegeorgia.org***

GEORGIA AVIATION HALL OF FAME

Located inside the Museum of Aviation, the Georgia Aviation Hall of Fame honors trailblazing aviators with roots in the Peach State. Many inductees—such as WWII ace Frank McAfee and 346-mission veteran John Paulk—earned their wings during the Second World War. Their stories reflect the courage and innovation that defined the era.
gaaviationhalloffame.com

MUSEUM OF AVIATION

One of the largest aviation museums in the Southeast, the Museum of Aviation showcases Georgia's aviation legacy with immersive exhibits and restored aircraft from WWII to the Space Age. In the WWII Scott Hangar, stand beneath a suspended C-47 Skytrain or witness a B-17 Flying Fortress restoration. Explore the heroism of the Tuskegee Airmen and learn how they broke barriers. The Georgia Aviation Hall of Fame honors pilots like Frank McAfee and John Paulk. ***museumofaviation.org***

NATIONAL MUSEUM OF THE MIGHTY EIGHTH AIR FORCE

Five miles high over enemy territory, the men of the Eighth Air Force became the "Masters of the Air." At this world-class museum near Savannah, step inside a recreated bomber and experience the courage, sacrifice, and grit of America's WWII bomber crews. The Mighty Eighth Museum preserves their stories through immersive exhibits and powerful narratives. Dine at Miss Sophie's Marketplace for authentic British fare, then explore Savannah's historic charm. ***mightyeighth.org***

WORLD WAR II FLIGHT TRAINING MUSEUM

Step back in time at Georgia's most intact WWII contract flight training base. From 1941 to 1944, thousands of cadets trained at the Douglas facility before becoming wartime aviators. Today, you can walk the airfield, tour original buildings, and learn about their journey from cadets to heroes. The museum captures the heart of primary flight school, showcasing authentic training aircraft and personal stories. ***wwiiflighttraining.org***

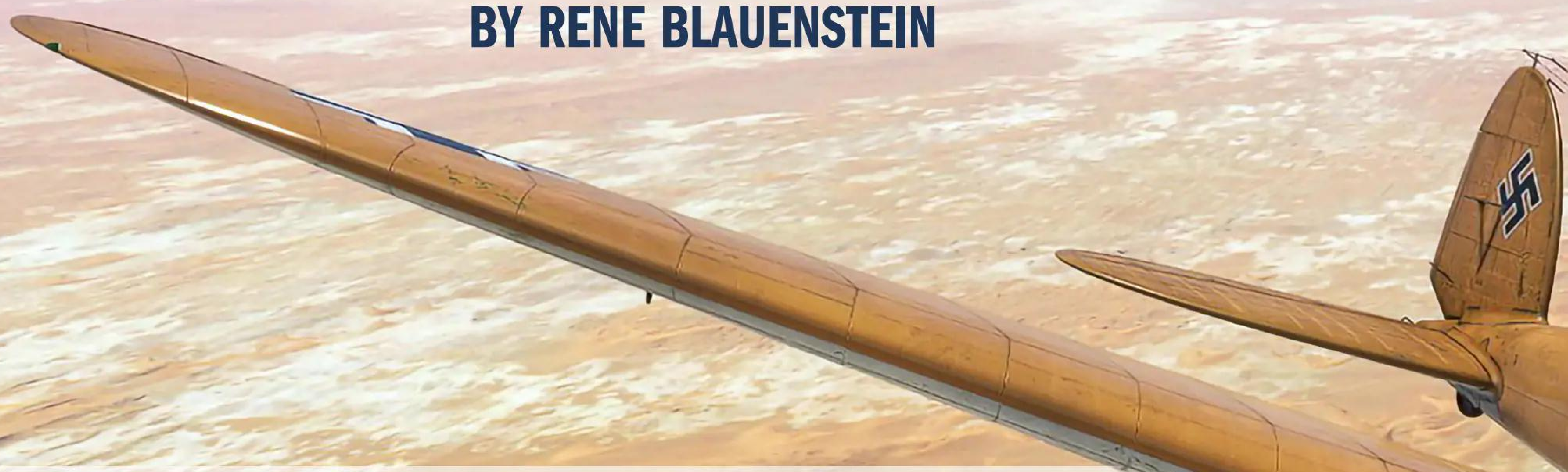
GEORGIA
WWII
Heritage Trail

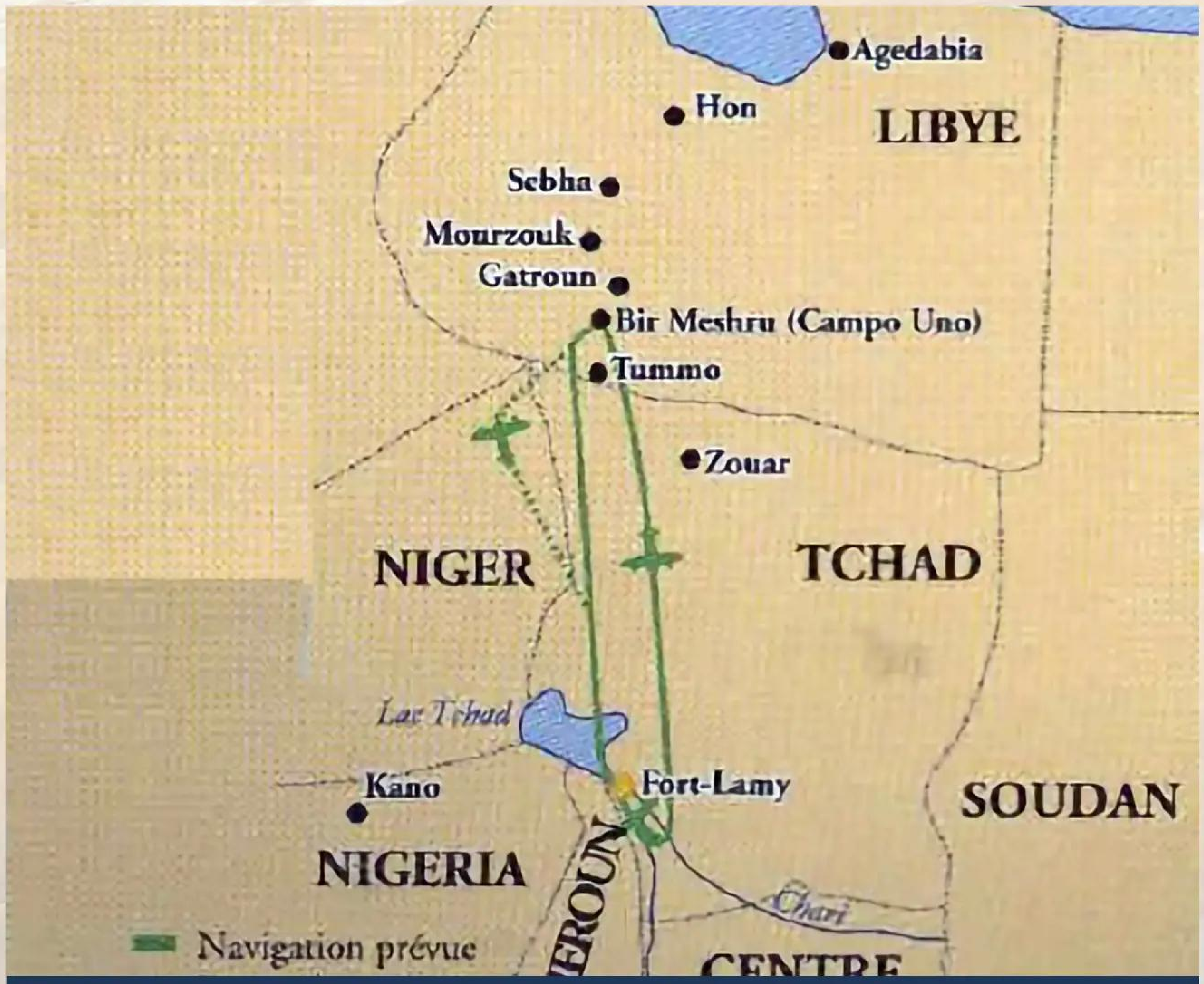
VISIT GEORGIAWWIITRAIL.ORG

ATTACK OF SONDERKOMMANDO BLAICH

THIS LITTLE-KNOWN LUFTWAFFE UNIT — WITH ONE BOMBER, ONE LIGHT AIRCRAFT, A CONVERTIBLE CAR, AND A LOANED ITALIAN TRANSPORT — SET OUT TO MAKE BOMBING HISTORY WITH A LONG-DISTANCE RAID ON AN ALLIED AIRFIELD IN NORTH AFRICA

BY RENE BLAUENSTEIN



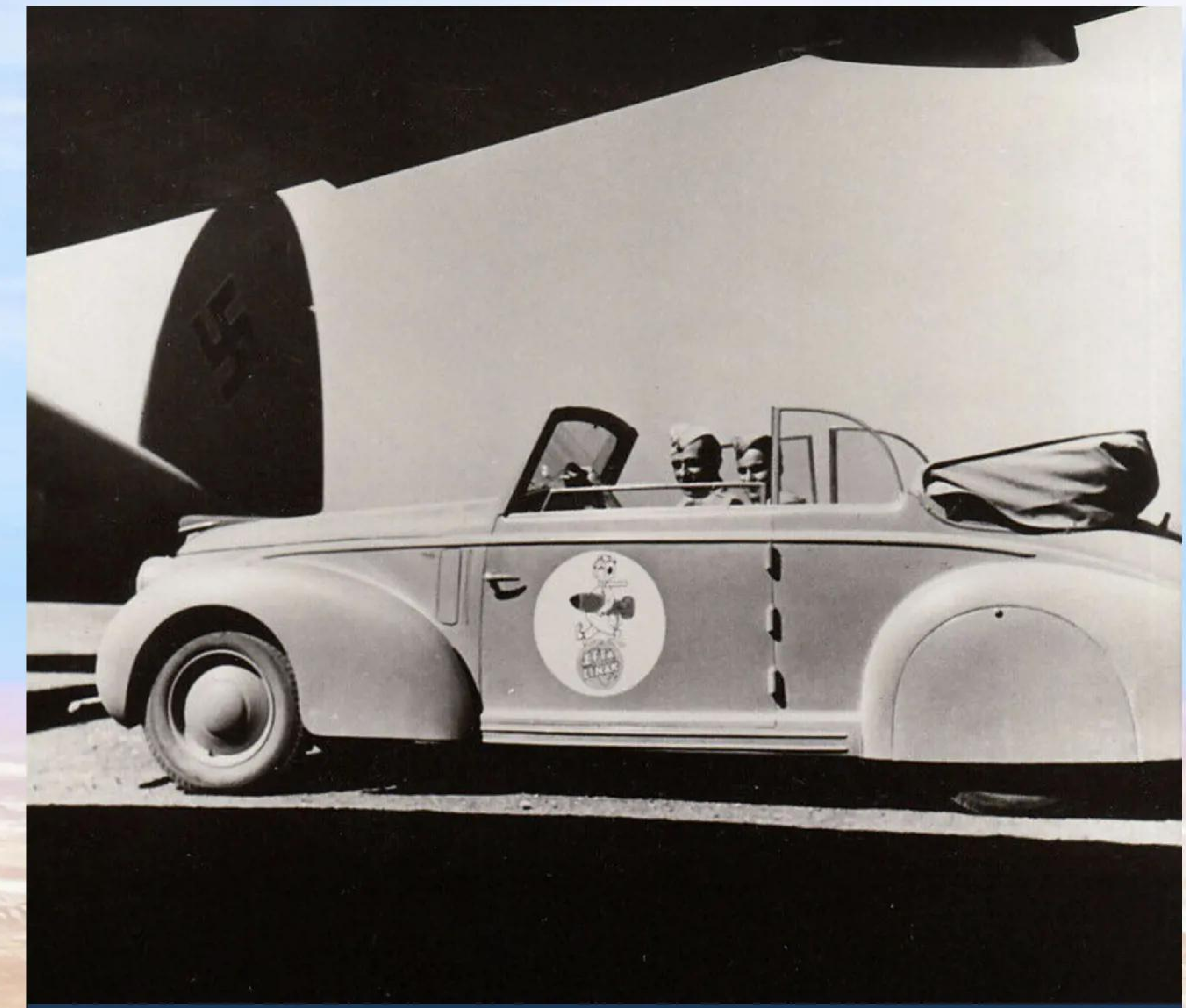


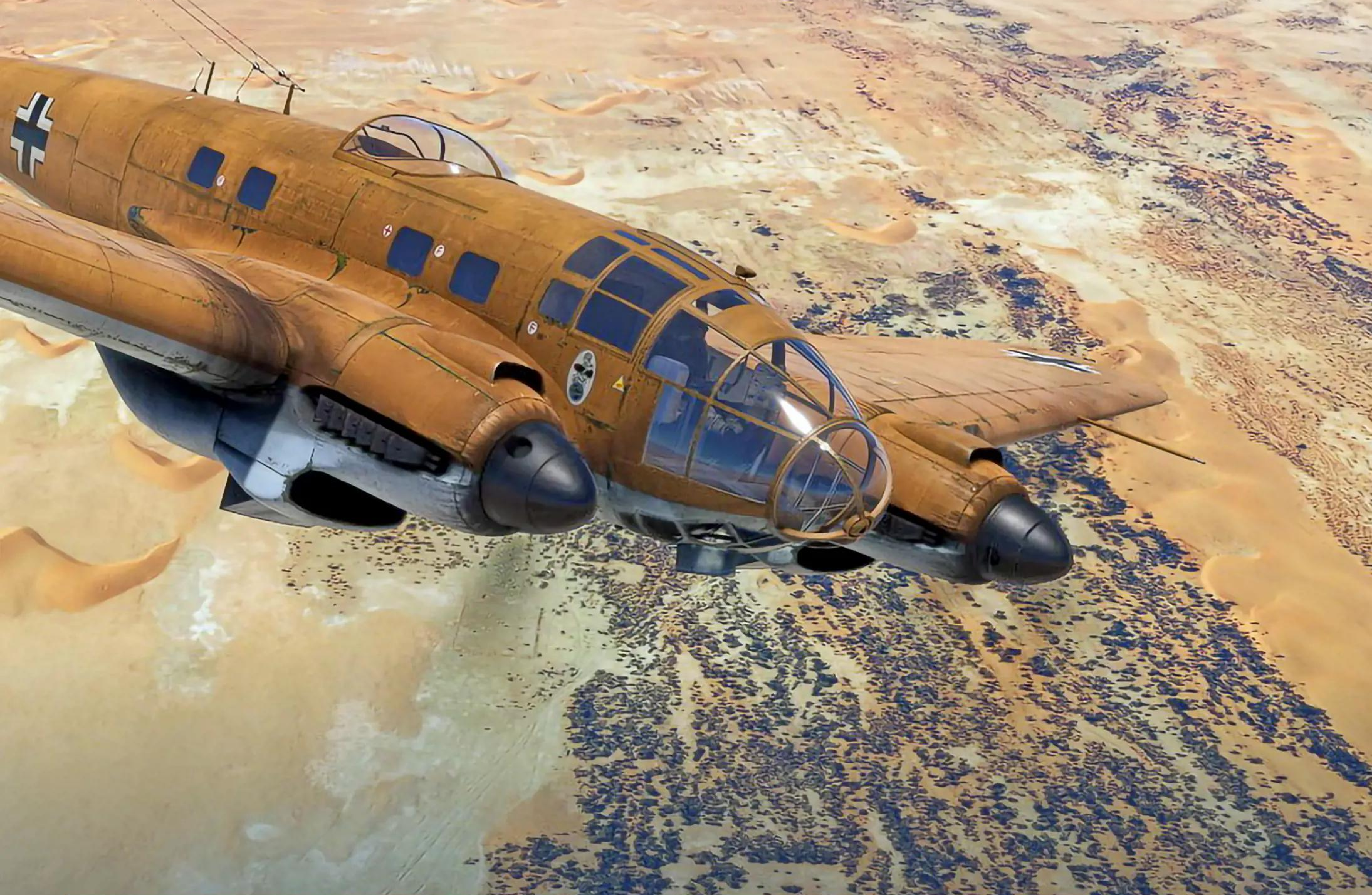
Map illustrating the He 111H-6's route from *Campo Uno* to Fort Lamy over one of the most inhospitable stretches of desert known to man. On 11 June 1937, Amelia Earhart and Fred Noonan flew their Lockheed 10E Special NR16020 from Gao, French Sudan, to Fort Lamy, French Equatorial Arica, a distance of 910 nautical miles.

During the early days of the Second World War, the German military had little to no respect for their French "allies" that comprised the Vichy French government established in the uncontrolled area of southern France. Even the Germans were startled by just how quickly the Vichy turned on their own people — rounding up jews and other "undesirables" at a pace faster than that of the Nazis. Even gathering French citizens by the tens of thousands to send off to very harsh working conditions at German factories was not beyond the Vichy government. The northern portion of the nation was firmly under German control while many of the French aircraft, pilots, and crews of the *Armee de l'Air* that survived the *Luftwaffe* onslaught of May 1940 quickly changed sides, painted yellow and red stripes on their aircraft to denote Vichy affiliation, and began fully cooperating with the Germans on plans to attack the British and the other Allied forces. Battle-hardened *Luftwaffe* pilots were careful when operating with the French since there was little trust on the part of the German aviators but if the French could be used to some effect against Britain, then the Germans would fully endorse that concept.

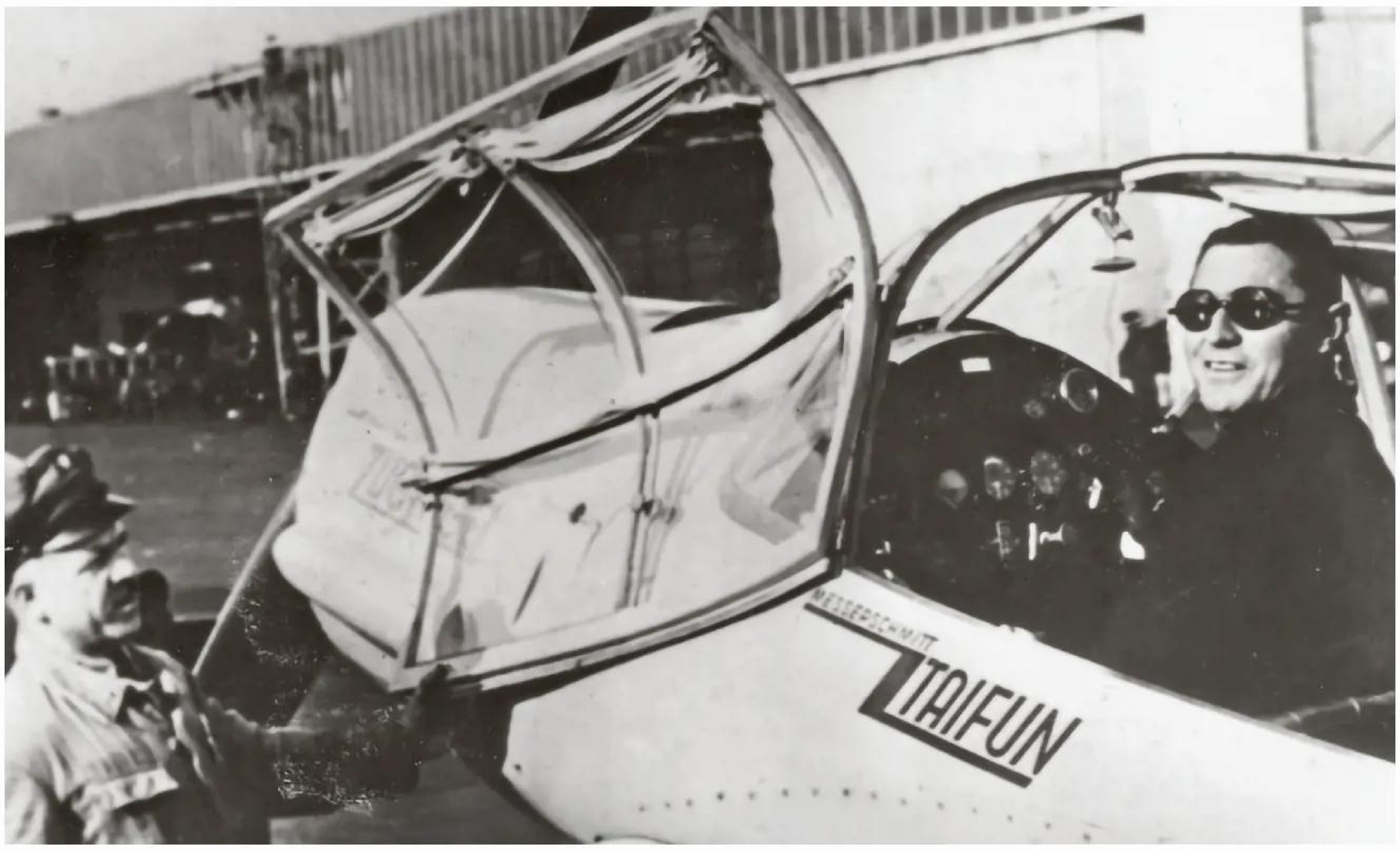
The British, for their part, quickly developed an equal dislike for the Vichy regime and would destroy French aircraft on the ground and in the air. A great deal of the airworthy Vichy air arm had departed to North Africa where they not only attacked the British but also their own countrymen that were operating as part of the Free French forces. To say the time period in France and its sprawling colonies was confusing would be an understatement.

The Germans decided to take advantage of the novel concept of French fighting French and if Charles de Gaulle's Free French forces could be destroyed in the process, then all the better. One of the sore points with the Germans was the


Blaich with his prized Fiat 1500 convertible. At this point, the auto had received standard *Luftwaffe* desert paint along with a large *Sonderkommando Blaich* insignia.


A digital art representation of the Heinkel He 111H-6 being flown over the featureless desert on its way to attack the Free French/RAF installations at Fort Lamy. The mission was to destroy as much of the stored fuel supplies as possible in order to hamper Allied aircraft operations. This digital art fails to carry the aircraft's coding of VQ+BA.

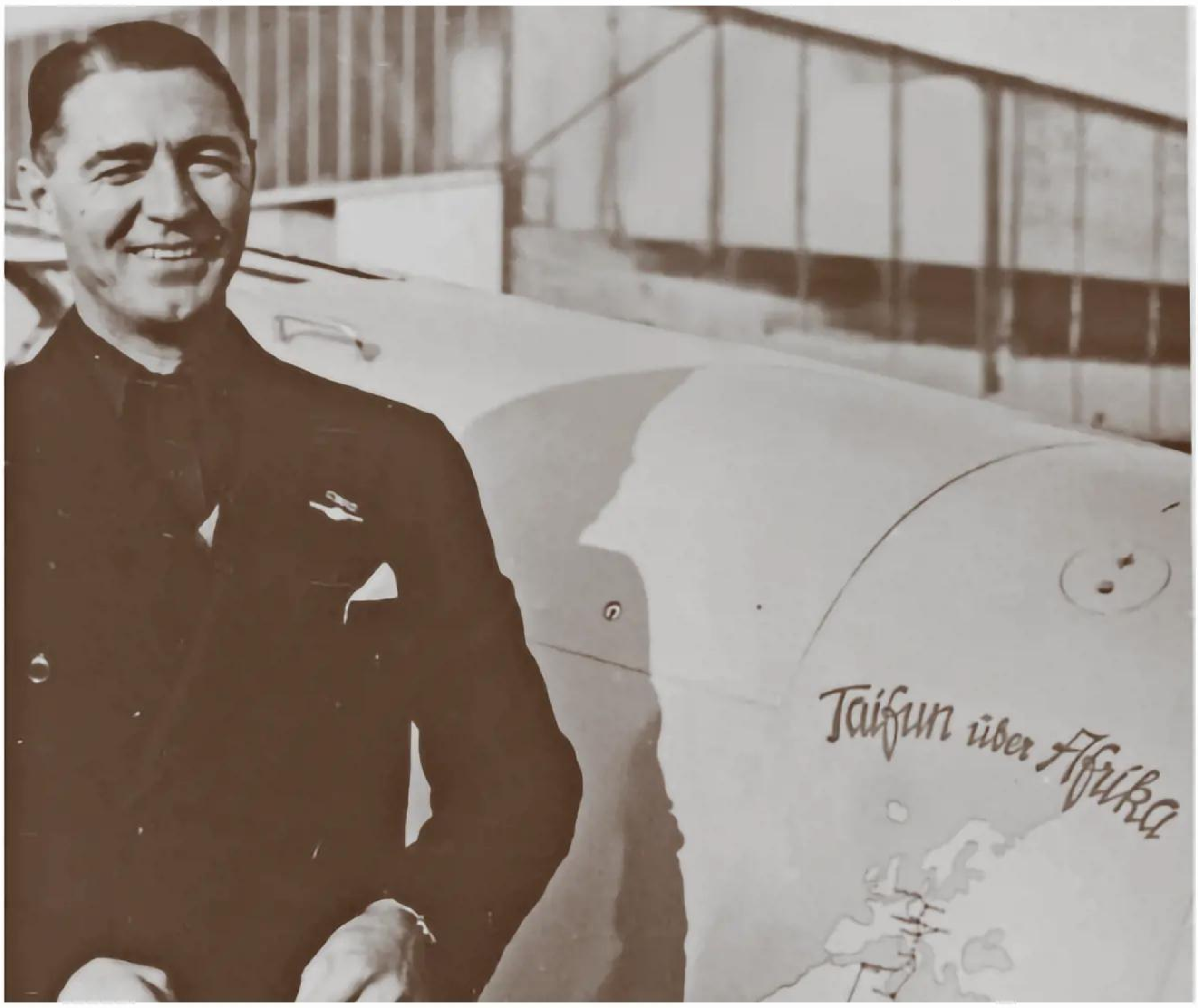
Blaich was an adventurer that had some money from plantations and other enterprises. He also believed in the Nazi ideals and was able to establish his own small squadron with recommendations from Gen. Rommel.



Blaich with his Messerschmitt Bf 108B. At this point, the aircraft was still in its civil paint scheme.

fact that the British and Free French had captured Fort Lamy during 1940. Fort Lamy was founded by the Emile Gentil on 29 May 1900 as part of France's bloody colonization of Central Africa. During the early part of the war, the French relied upon Fort Lamy's airfield to move troops and supplies. Located in the Chad region of French Equatorial Africa, the airfield had become a major irritant for the Germans. The fort had been named for Amedee-Francois Lamy who was a French army officer that had been killed on 22 April 1900 in the Battle of Kousseri against the Sudanese warlord Rabih al-Zubary ibn Fadl Allah.

Fort Lamy (now N'Djamena, the capital and largest city of Chad) was at the time a major trading center. Located almost in the center of Africa, it was a relatively modern citadel at the junction of the most important traffic routes. From the Atlantic coast and the harbor of Duala, Fort Lamy was at the crossroads to the Belgium Congo and Algiers, especially at the route from Lagos through Fort Lamy and the Sudan to Cairo.



With his beloved Bf 108B, Blaich made a tour of Africa and the map was painted on the side of the fuselage with the working *Taifun uber Afrika*. He would later put the knowledge he gained to work by bombing Fort Lamy.

A thorn in the side for the Germans, Fort Lamy's governor Felix Adolphe Eboue told Gen. Charles de Gaulle that he wanted to support the Free French. On 26 August 1940, Chad became the first French colony to announce its affiliation with de Gaulle and the Free French. Then Col. Pierre Marchand, commander of the *Regiment de Tirailleurs Senegalais du Tchad*, also gave his support to the Free French and that group began to rely upon the airport at Fort Lamy to move troops and supplies — especially the huge mountains of supplies being sent by the United States, still a neutral in the war. The Germans would have liked nothing better than to eliminate this troublesome area along with what they viewed as the turncoat French.

There was one big problem for the attacking *Luftwaffe* — the airfield was located 1250 miles from German air bases in North Africa. Much of the landscape was featureless desert that made navigation dangerous if not nearly impossible. Also, Britain's very effective Special Air Service (SAS) and the Long Range Desert Group (LRDG) had been causing the loss of lots of German and Italian aircraft and fuel supplies with their hit-and-run raids. The LRDG had set up a major base at Fort Lamy and would set out from the airfield for their strikes against German targets. The airfield was also an important leg in the Royal Air Force delivery route from RAF Takoradi in Ghana to Egypt.

The Germans needed someone as effective and daring as the individuals that had established the SAS ("Who Dares Wins") and they found him in the form of the very curious Theodor "Theo" Blaich. Not a tremendous amount is known about this most interesting person but he was born on 5 April 1900 in Tubingen, Germany, and was one of eight siblings. During the Great War, Blaich claimed to be the youngest pilot (age 15!) on the Eastern Front. After that war, he immigrated to Canada and would later say he lost one of his brothers while swimming across one of the Great Lakes to illegally enter the USA. Looking at a map adds some doubt to that claim. He then headed to South America and worked for the United Fruit Company. Then in the 1920s, he immigrated once again — this time to Cameroon where he claimed to have built that nation's largest banana plantation. The plantation also had its own railway station and airfield with three aircraft.

The 21 November 1935 issue of the British magazine *Flight* notes: "Herr Theodor Blaich, a German owner of a plantation in West Africa, has had a refresher course and took a British 'A' license with the Airwork School last week. He has bought a small Junkers monoplane [probably an F.13] and is fitting it with floats and shipping it to West Africa."

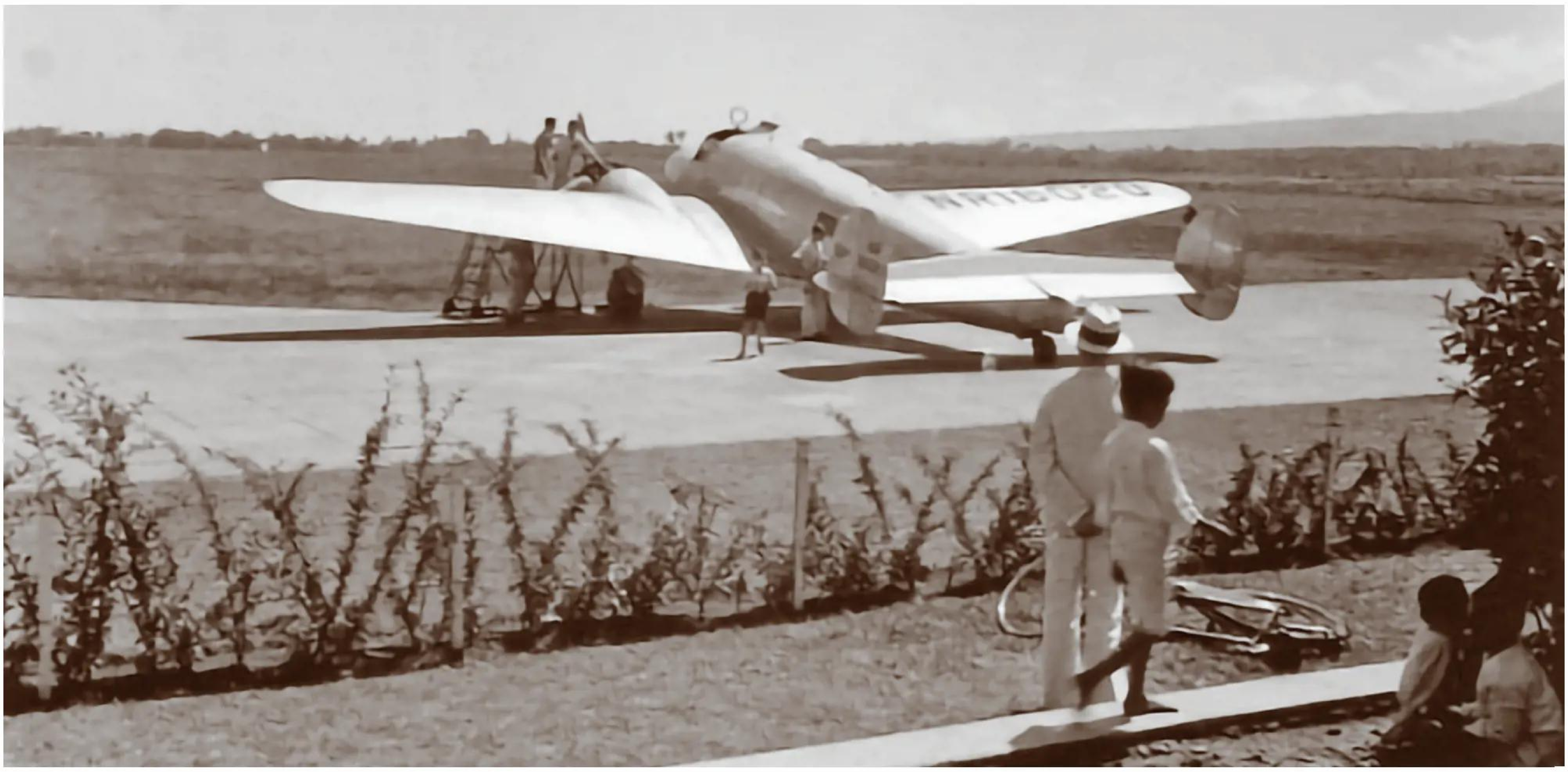
An adventurer in every sense, Blaich's marriage included a honeymoon flight from Cameroon to Berlin but this was curtailed following an emergency landing in the Sahara. The passenger list for the airship *Hindenburg* shows that Blaich took a "sky cruise" in the aerial behemoth from 5/9 October 1936. At the start of the Second World War, it appears he lost his plantation and soon joined the *Luftwaffe*. His political leanings were probably on the side of the Nazis but not heavily so.

Blaich liked doing everything with his own style. Sometimes referred to as the "Nazi Lawrence of Arabia," Blaich arrived in his own personal Messerschmitt Bf 108 *Taifun* (Typhoon). The high-performance four-seater was the plane of choice for wealthy German sport pilots. Prior to the war, Blaich had used the *Taifun* for this own *Afrika Rundflug*, in which he flew the *Taifun* around Africa and various French and Belgium colonies during November/December 1938. This allowed him to also scout out many possible military sites. It gets a bit confusing at this point, because the early references note the plane as a Bf 108B, which was a civilian variant. Later references refer to it as a military Bf 108D-1 with the coding KG+EM, and this variant did not appear 1941.

Now, it gets even more confusing. On 10 January 1940, an event took place that became known as the "Mechelen Incident." On that date during the Phony War, a Bf 108 was being flown by two *Luftwaffe* officers. Against direct orders, they were airborne with the plans for *Fall Gelb* (Case Yellow), which consisted of top-secret documents for the German invasion of the Low Countries. Through pilot error, the aircraft crash-landed in neutral Belgium and authorities aiding the two injured Germans found

Aerial photo of Fort Lamy immediately before the war. The town was an oasis of civilization is the desert wilderness.

The Germans were all-out to destroy the capabilities of the SAS and LRDG whose roving raids were causing tremendous damage to *Luftwaffe* and Italian facilities.



Amelia Earhart and her Lockheed 10E at Fort Lamy on 11 June 1937. Although there is no record, it would seem logical that Earhart and Blaich would have meet at some point as she crossed through Africa. She would write, "On this day's flying to [Fort] Lamy and the next, we crossed stretches of country barren beyond words, a no-man's land of eternal want, where the natives cling tenaciously to an existence almost incomprehensible to westerners."

Blaich goes over plans with fellow German and Italian crewmembers and the horizontal tail of their lone He 111H bomber serves as a map table.

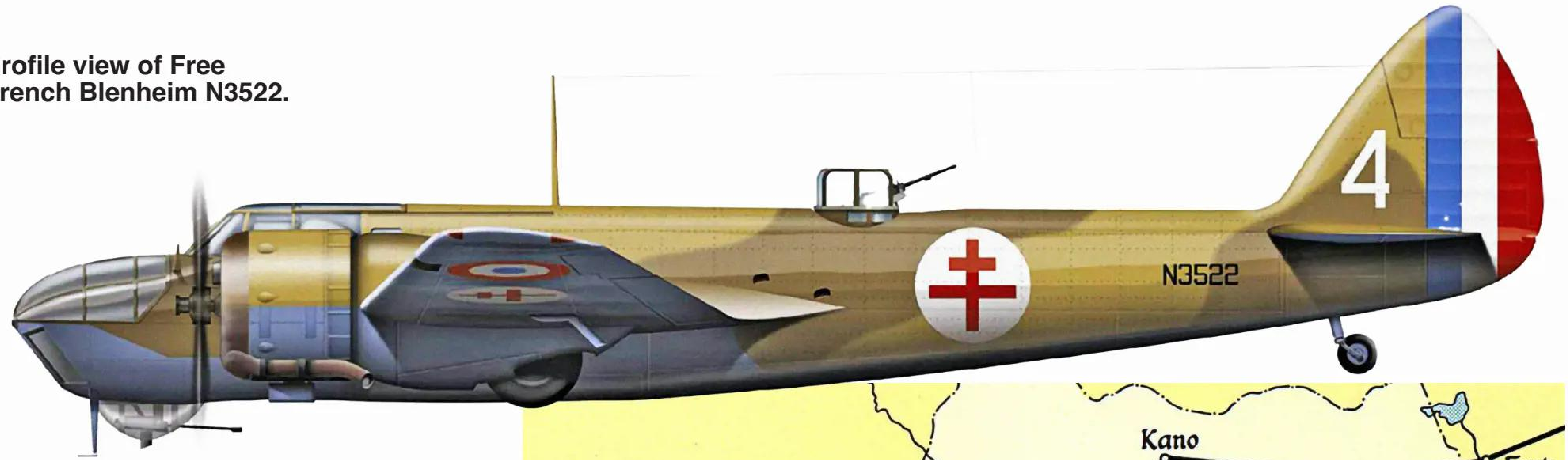
The Free French had several squadrons based at Fort Lamy flying Bristol Blenheims.

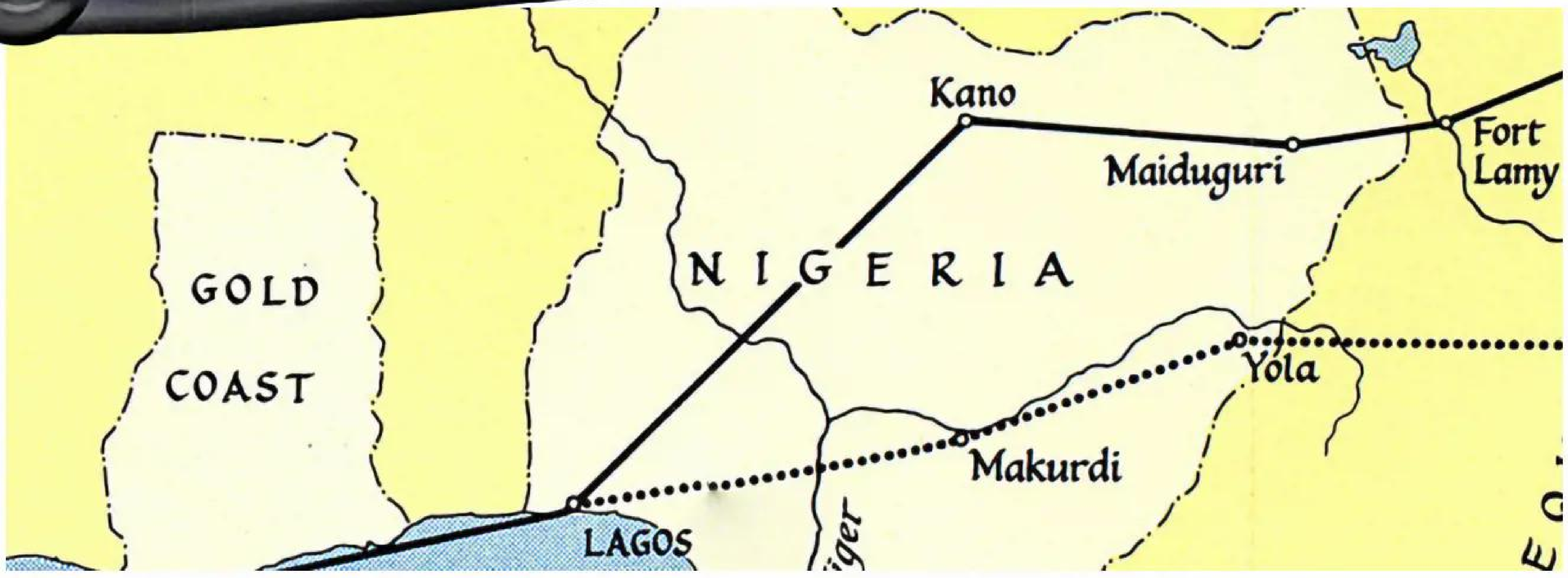
the documents. The Belgians passed the knowledge to British and French governments and a crisis loomed but it abated once the dates listed in Case Yellow came and went. However, it has been said that the Germans had to quickly alter their plans because of the data that was captured. It gets a bit more interesting since some sources state that the Bf 108 had belonged to Blaich! If so, it seems that this would be the type of intrigue that would attract Blaich. It would also mean there were two Bf 108s — the earlier B model and the *Luftwaffe* D model, but none of this has been substantiated.

It also appears Blaich worked on other clandestine efforts for the Nazis. On 7 June 1941, he participated in the attempted kidnapping of Gen. Aziz el Masri, who was the Egyptian chief of staff but had been dismissed from that post during 1940 by the insistence of Great Britain. The Brits claimed he was working with the Germans to destabilize Britain's influence in Egypt. It was decided that a German aircraft should bring el Masri to Berlin. This endeavor was given the code-name of Operation *Pasha*.

It was actually a pretty whacked-out undertaking that involved two Heinkel He 111s acquired following the German victory at Crete. The planes came from *II./KG26* but the cast of characters could

Profile view of Free French Blenheim N3522.



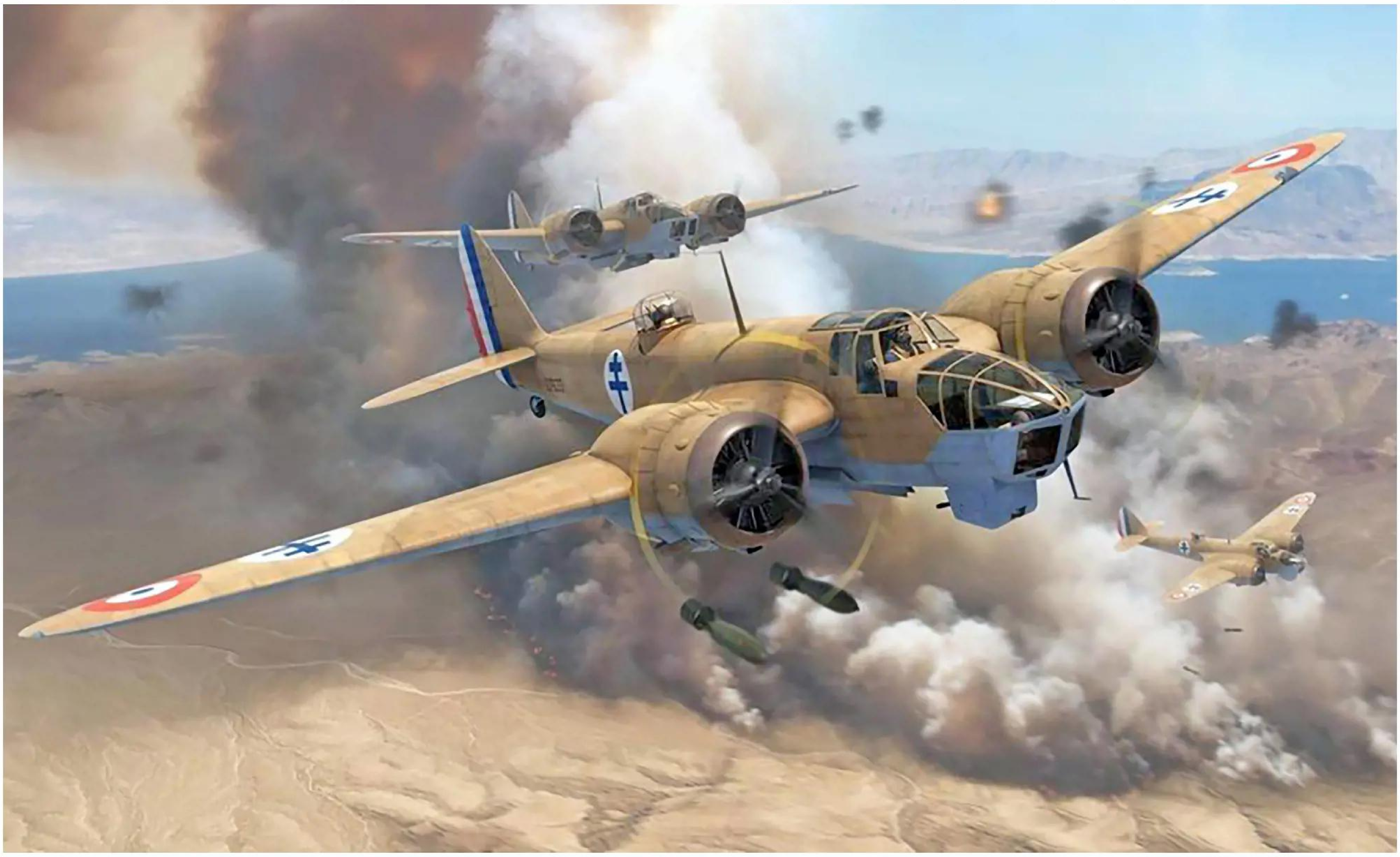


Map showing Fort Lamy (top right) and illustrating the importance of the base as a supply route for the RAF and British ground units.

have come out of central casting for a bad Hollywood film. First, we had Count Laszlo Ede Almasy de Zsadany et Torbokszentmiklos (the "mittle" European *ersatz* aristos seem to like really long names) and Count Almasy, as he was known, was an aristocrat from Hungary, with was also a Scout-leader (a questionable qualification for a military adventurer), soldier, racing motorist, aviator, and, perhaps most importantly for *Pasha*, a desert researcher. Then came Maj. Nikolaus Adolf Fritz Ritter who was head of the German espionage activities in the area. Ritter met with the Count and was quite impressed although he noted the Count was often surrounded by young, well-muscled scouts in tight shorts. It became obvious to the German that the Count was completely fascinated by the blistering heat, suffocating sandstorms, infernal winds, endless flats, surreal dunes and everything else that comprised the desert. The Count was the man for the rescue mission.

Into this curious mix came Blaich and *Pasha* began to pull itself together. Blaich and the count picked a flat piece of desert near the Red Jebel oasis road. Ernst Haller was a pilot from *II./KG26* and he would be flying the escorting Heinkel with Ritter as passenger and Blaich as observer. The count would fly the second aircraft and it was this Heinkel that would pick up el Marsri. Both aircraft were painted in *Luftwaffe* markings but for some now-forgotten reason, el Masri wanted to fly to the rendezvous in an aircraft belonging to Egypt and this misplaced loyalty to the questionable professionalism of the Egyptian Air Force muddied up plans.

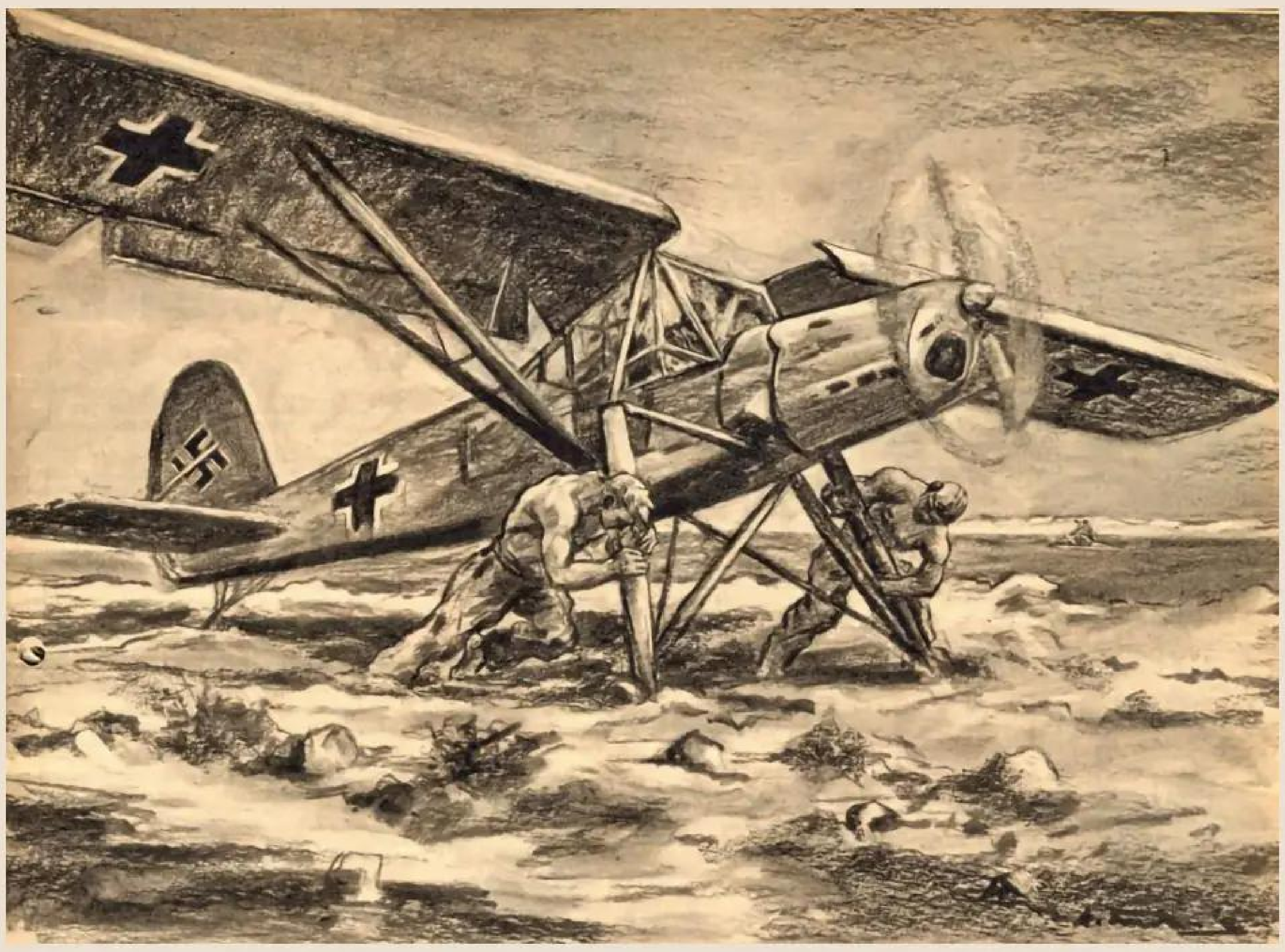
The Egyptian aircraft took off on 7 June 1941 and headed to the pre-planned pick-up location. However, a



Digital art depicting Free French Blenheim Mk. IVF of *Groupe Lorraine* attacking German desert targets.

THE GERMAN DESERT RESCUE SQUADRON

HOW THE LUFTWAFFE DEVELOPED A METHOD TO SAVE THEIR PILOTS

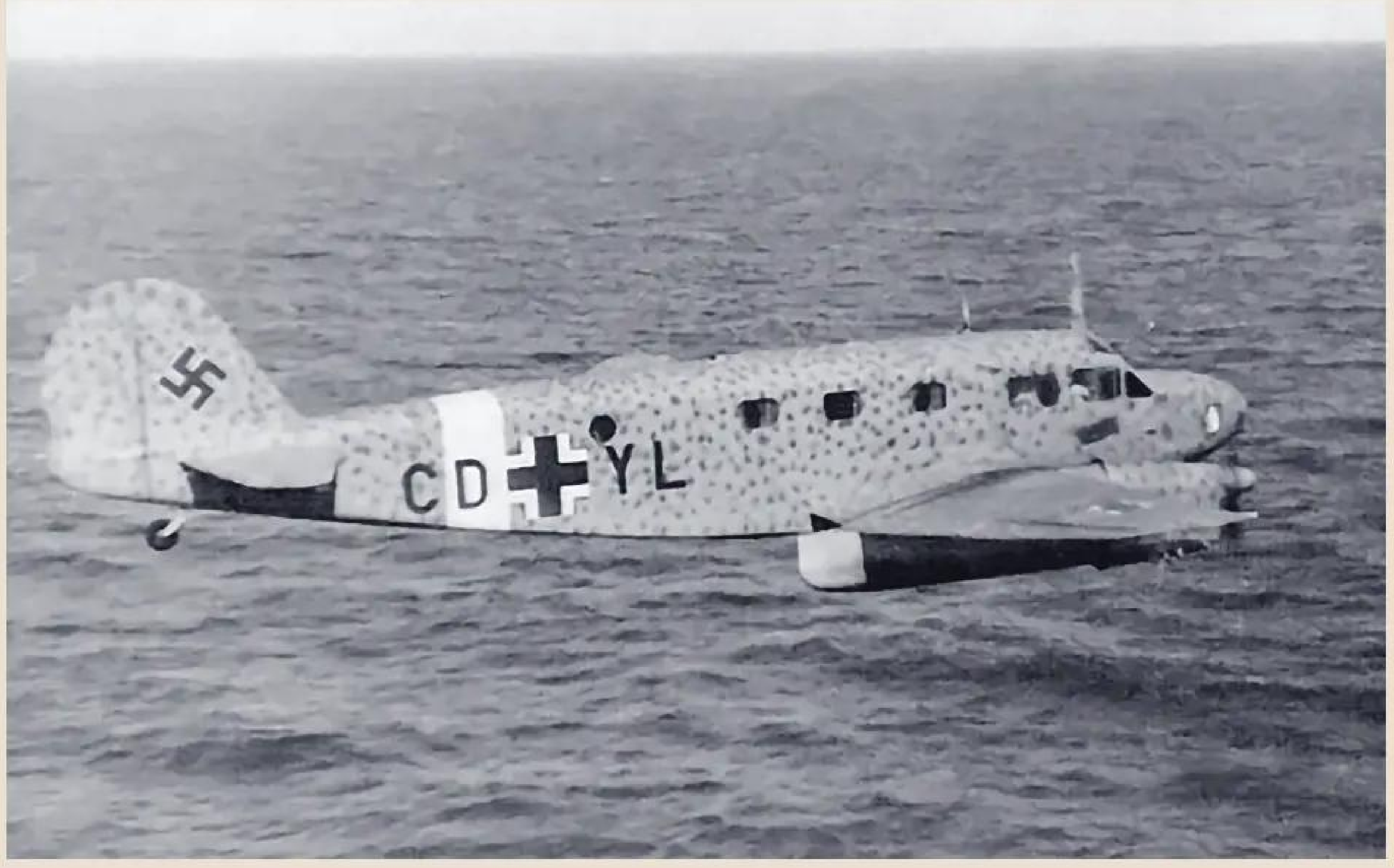


Wartime illustration of the crew of a Desert Rescue Squadron *Storch* attempting to free their aircraft from the sand.

For downed *Luftwaffe* aircraft, the featureless wasteland of the North African desert was a dismal and deadly place. Extreme heat and extreme cold made the rapid rescue of these airmen absolutely essential. To accomplish this vital mission, *Wustennotstaffel* was created during the summer of 1941. The unit operated under the command of *Fliegerfuhrer Afrika*. The main enemies of the unit were, of course, the Long Range Desert Group (LRDG) and the Special Air Service (SAS) but *Staffelkapitan* Heinz Kroseberg realized the importance of saving the downed *Luftwaffe* airmen as quickly as possible and he organized a very effective unit.

Initially utilizing Fieseler Fi 156 *Storch* aircraft, *Wustennotstaffel* quickly gained an excellent reputation for rescuing downed Germans along with Allied aircrews they found. Also, the *Storches* were utilized for tracking down the trucks and jeeps of the SAS and LRDG. Once found, they would call in combat aircraft to deal with the British. However, the slow *Storches* became instant targets for the guns of the marauding British.

The *Storch* could land just about anywhere to rescue Axis or Allied pilots. However, the Allied pilots gained a poor reputation by attempting to shoot down the rescue aircraft and strafe their crews.



The Desert Rescue Squadron could also utilize aircraft such as this Caproni for some of their more specialized missions.

The slow-flying *Storches* made easy targets for the Allied fighters but the skilled pilots could often escape by flying extremely low and slow while performing tight maneuvers.

The rugged *Storch* could go just about anywhere and they often rescued German pilots moments before the would have been captured by the British or their Allies. They also evacuated badly wounded German soldiers to medical units where they could receive treatment.

One would never know what a typical mission would be. One of the *Storches* spotted a Douglas Boston crash-land after being shot down. The four crewmen exited their aircraft, which was with No. 24 Squadron South African Air Force, and were surprised when the *Storch* landed nearby. Another *Storch* was called in and Lt. B.G. Roxburgh and his crew became “guests of the Germans.” But it was better than dying of thirst in the unforgiving desert.

On one mission, Korseberg was searching for a downed crew when he was bounced by Curtiss Tomahawks from No. 3 Squadron, Royal Australian Air Force. Korseberg tried every trick in the book but the odds were against him. With flaps and landing gear down, Sgt. Rex Wilson riddled the *Storch*, which crashed into the desert. Korseberg and his two passengers scrambled from the wreck but then in a show of unsportsman-like activity, Wilson made strafing runs on the men, wounding one of them, before departing. They were eventually rescued by other *Storches*.

Obtaining spare parts for the small fleet was a nightmare. For example, on 26 November 1941, the unit had eight *Storches* on strength but only three were flyable. On 10 December 1941, it was even worse and of the eight on strength, only one could stagger into the air. Yet they carried on with their dangerous missions.

Always involved in the battle against the SAS/LRDG, they also flew Rommel and Kesselring on important missions. The unit could call in a variety of specialized aircraft to help perform their missions, as they did with the Junkers Ju 52-3/ms involved in the rescue of the Heinkel crew. They also flew sabotage missions to knock out forward British units. They operated from the summer of 1941 to disbandment in the summer of 1943 when the German front collapsed. Heniz Kroseberg was awarded the *Ritterkreuz* for his effort in saving friend and foe alike. Unfortunately, it was a posthumous award since he died while trying to save German airmen downed in the Mediterranean off the North African coast.

few minutes after takeoff the Egyptian pilot began having problems and the aircraft lost height. He set up for a desert forced-landing but misjudged his altitude and hit the tops of some palm trees and crashed. The plane was a write-off, the pilot took off running, and, in an affront to his equally questionable dignity, el Masri was left dangling from a palm tree-top. He was rescued by a member of the Egyptian military police. A British officer then showed up on the scene of the debacle to arrest el Masri but, unknown to him, an elderly major who often acted as a double for el Marsri had been hastily put in his place and was hauled away to jail while the real el Masri hoofed it out of the area to safety. It took the Brits three months to figure out they had the wrong man. Through informants, they finally captured the real el Masri and imprisoned him.

The entire area was a hot-bed of intrigue and shifting loyalties. Blaich's knowledge of Africa was useful to the Germans and they wanted to do as much damage to British and Free French forces as possible. For his part, Blaich wanted to capture some glory while also supporting the Nazi cause. This is when Fort Lamy came under consideration. The SAS and the LRDG were becoming more and more effective, and daring night-time raids on forward *Luftwaffe* airfields were destroying aircraft and vital supplies of fuel. In fact, fuel had become more essential than the aircraft.

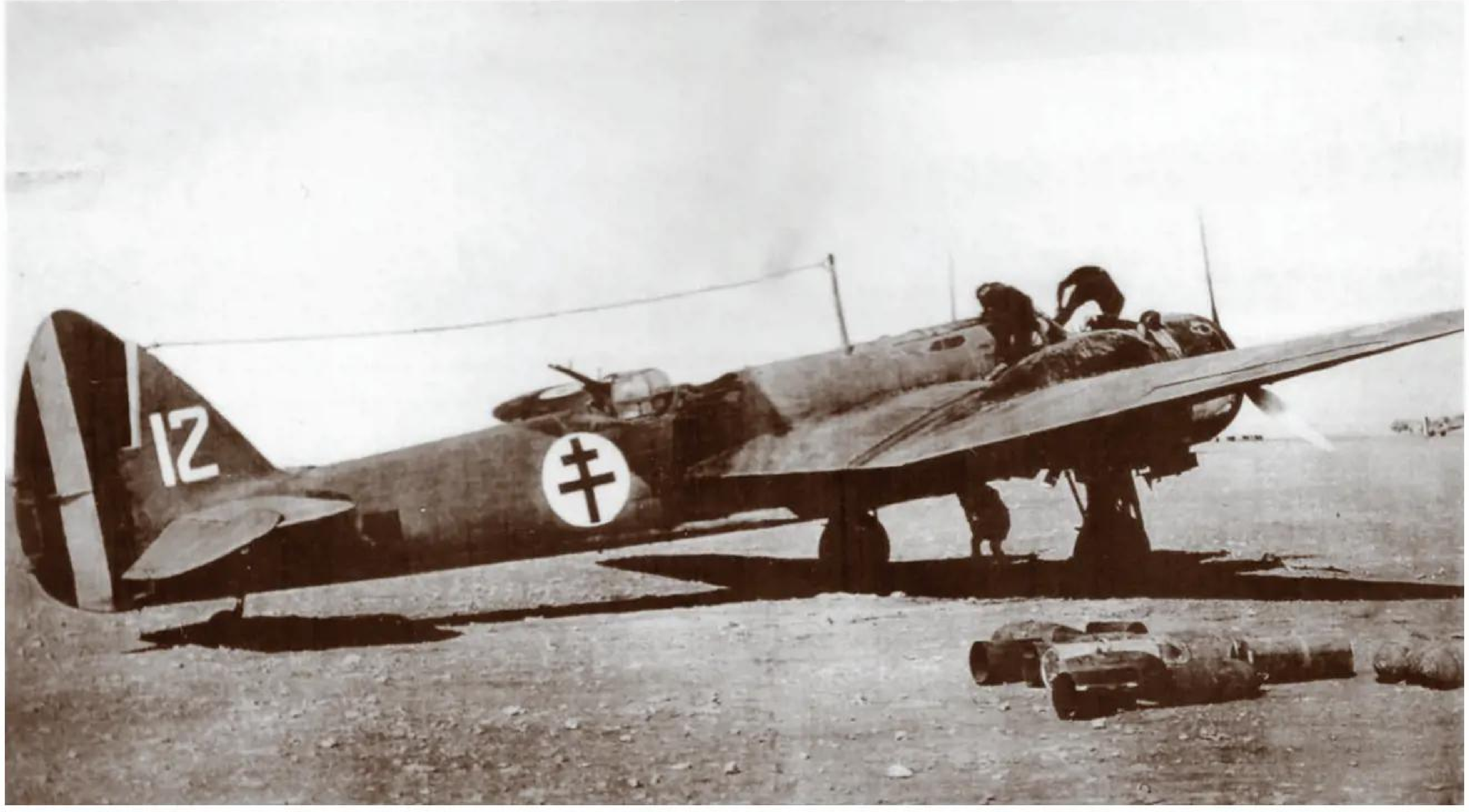
Blaich had no love of the Vichy French and he managed to convince Rommel and other high-ranking Germans operating in North Africa that the Vichy French could not be trusted. Using his influence, Blaich managed to exclude the Vichy French from his audacious plans and, instead, he replaced them with personnel from Germany's other ally — the Italians.

Rommel, the Desert Fox, was initially skeptical of Blaich. The adventurer was everything Rommel was not — publicity seeking, given to acting off the cuff, and incapable of completely formulating military plans. In the end, it seems that Blaich wore down the Desert Fox and Blaich was given the most minimal of supplies to create what was named *Sonderkommando Blaich*. The term *sonderkommando* meant "special force"

Hurricanes being unloaded at Fort Lamy with Blenheims in the background.

The Italian airfield at Sahba with the iconic Fort Elena in the middle. The first stage of the raid would launch from this field and head to *Campo Uno*.

British forces with captured Vichy aircraft after overrunning Fort Lamy.



Free French Blenheim Mk. IV being bombed up at Fort Lamy.

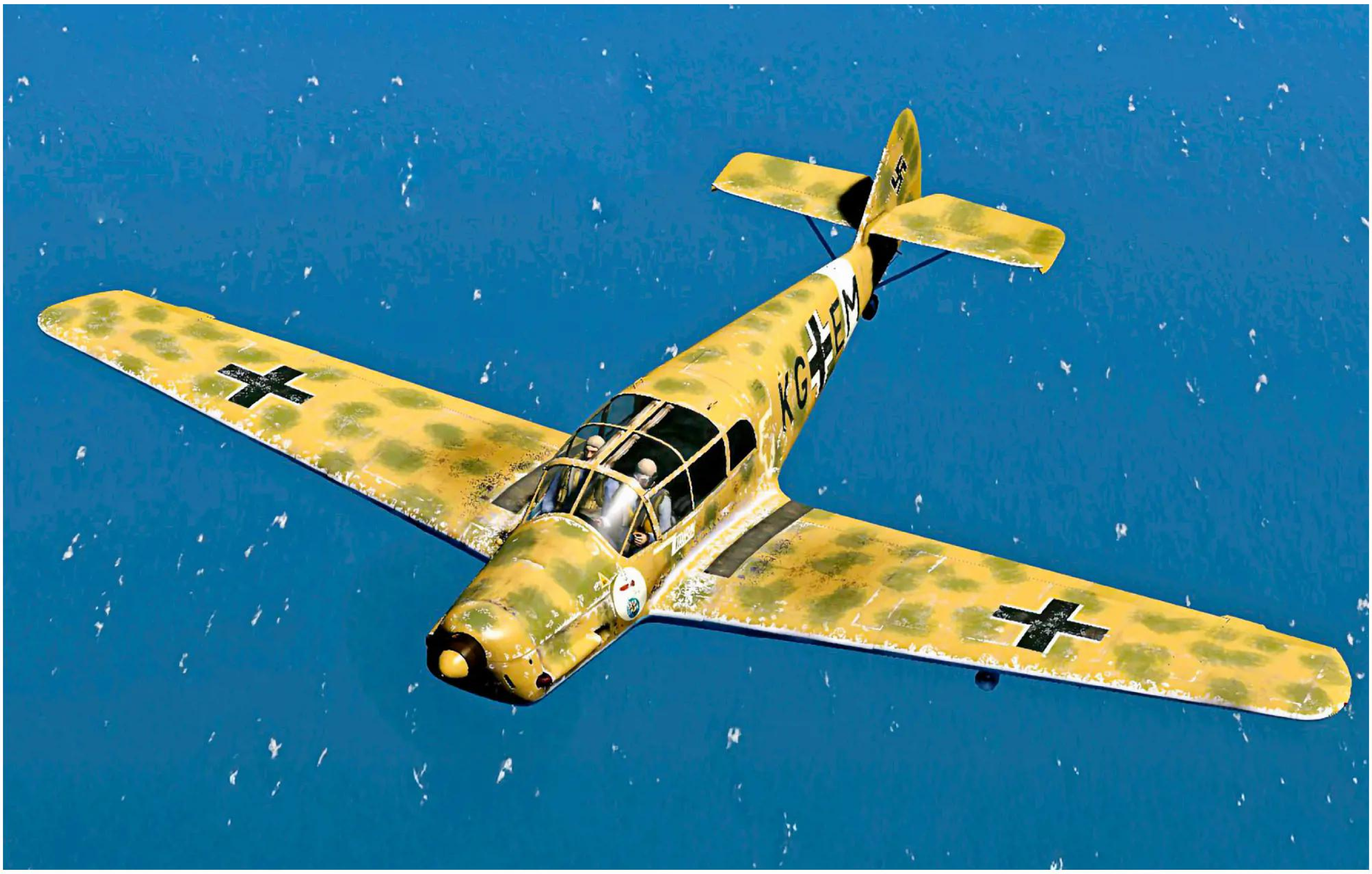
The Bf 108 was also utilized in scouting out possible targets for German forces.

and Blaich also claimed that he had been taken on by Rommel as a special advisor to the *Afrika Korps* — surely a false claim.

Blaich put Fort Lamy in his sights and he wanted to hit the airfield and hit it hard — not only to destroy aircraft and fuel supplies but to also do as much damage to the SAS and LRDG as possible. However, Rommel was rather niggardly when it came to supplying Blaich with weapons of war. The desert adventurer received the grand total of one Heinkel He 111H bomber. *Werk nummer* 4145 had been transferred to *Sonderkommando Blaich* from *II./KG 4* and this single aircraft would have to carry out Blaich's grand plan of attacking Fort Lamy.

One major point that had to be taken into consideration was the distance of the raid on the RAF/Free French airfield. This would be the *Luftwaffe's* longest distance bombing raid to be carried out in Africa. To accomplish this mission, which was actually quite hazardous, all extra weight had to be eliminated from the Heinkel so that additional fuel tanks could be installed.

At this point, *Sonderkommando Blaich* now had two aircraft — a bomber that would be limited to carrying 16



Digital art illustrating Blaich flying the *Taifun* from Hun Airfield.

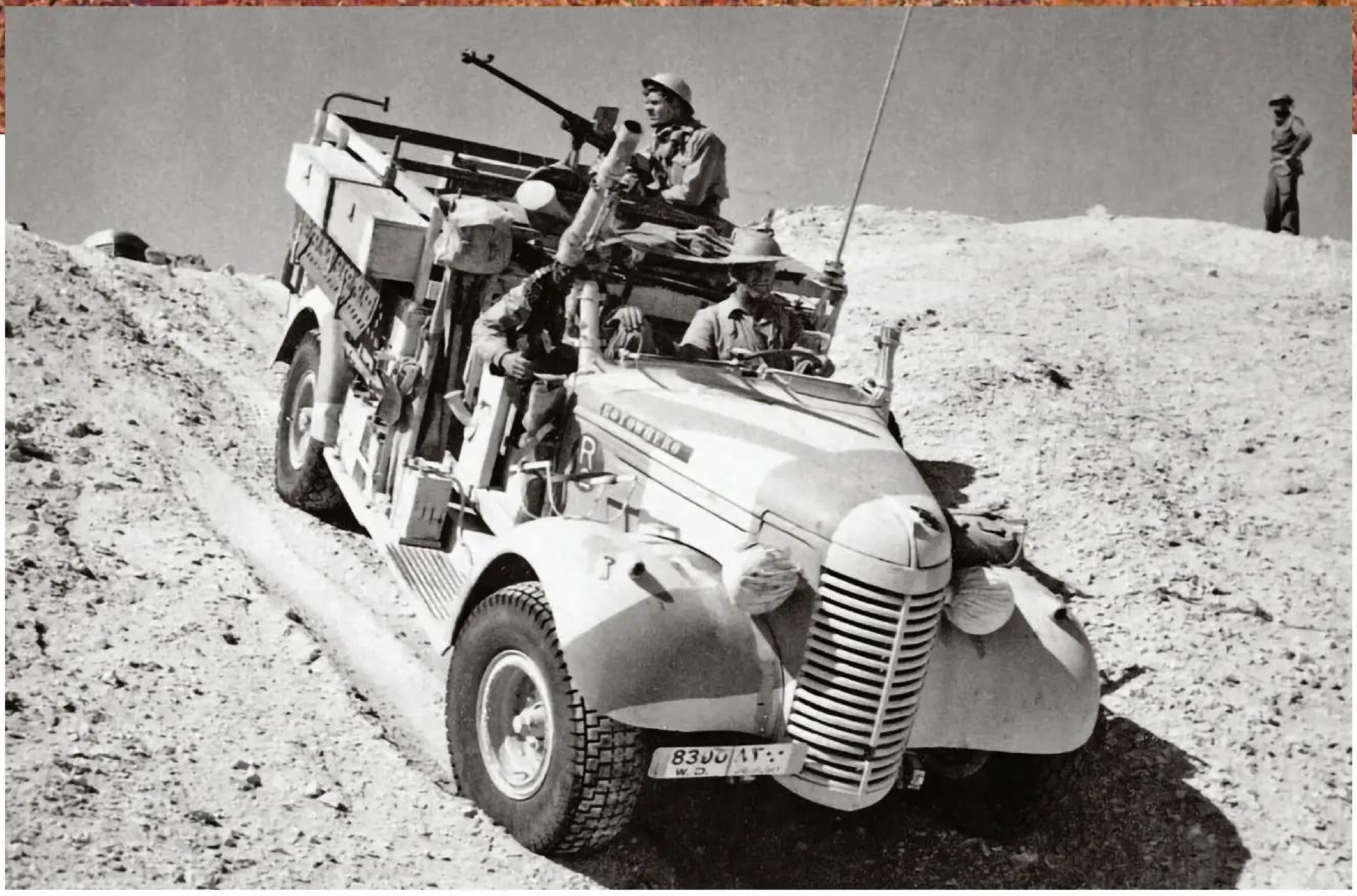
The tri-motor Savoia-Marchetti SM.82 was essential to the success of the bombing mission. As a transport, the aircraft carried the barrels of fuel to *Campo Uno*.

SC50 bombs, and a four-seat light aircraft. However, the Italians stepped forward and added Count San Severino, claimed to be Italy's greatest desert specialist, and a Savoia-Marchetti SM.82 *Marsupiale* bomber/transport that would serve as the pathfinder aircraft for the bomber while also carrying additional fuel supplies — guiding the Heinkel across the featureless desert to find its target at Fort Lamy.

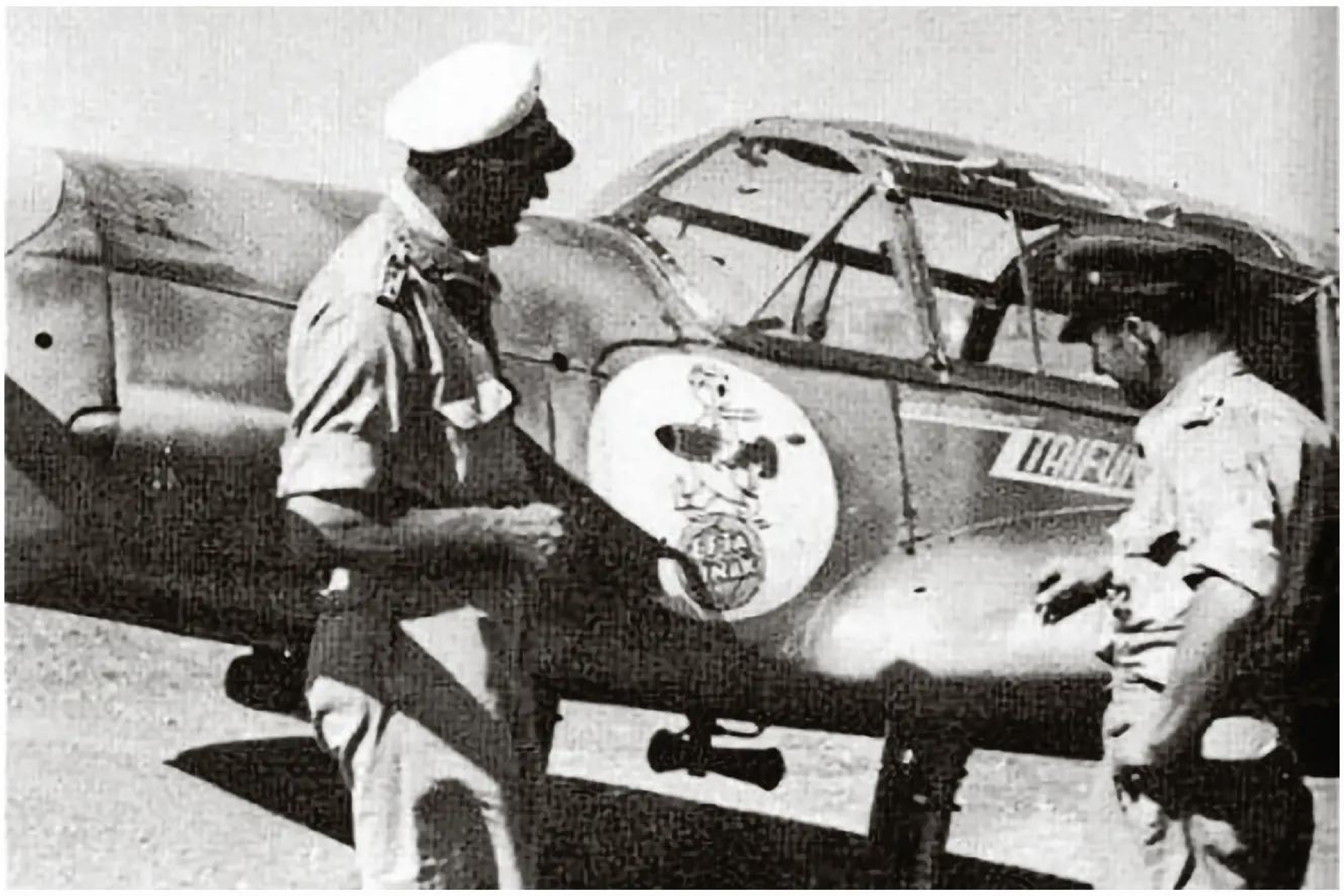
The large tri-motor *Marsupiale* could be used in dual roles and when serving as a bomber it could carry an impressive 9000 pounds of bombs. Savoia-Marchetti built 876 SM.81s and the type entered service in 1940. However, as a bomber it saw very limited action since it was vulnerable to fighter attack. As a point of interest, it was the foreign aircraft operated in the largest numbers by the *Luftwaffe* who used the plane as a heavy transport. As noted, it was very vulnerable to RAF fighters and several hundred were shot down or destroyed on the ground.

To this small force, Blaich added his own convertible Fiat 1500 while creating the attractive *Staffelabzeichen* insignia that was applied to all four vehicles. Initially, Blaich had suggested

(continued on page 74)



The airfield at Fort Lamy had become a major base for the British Long Range Desert Group.



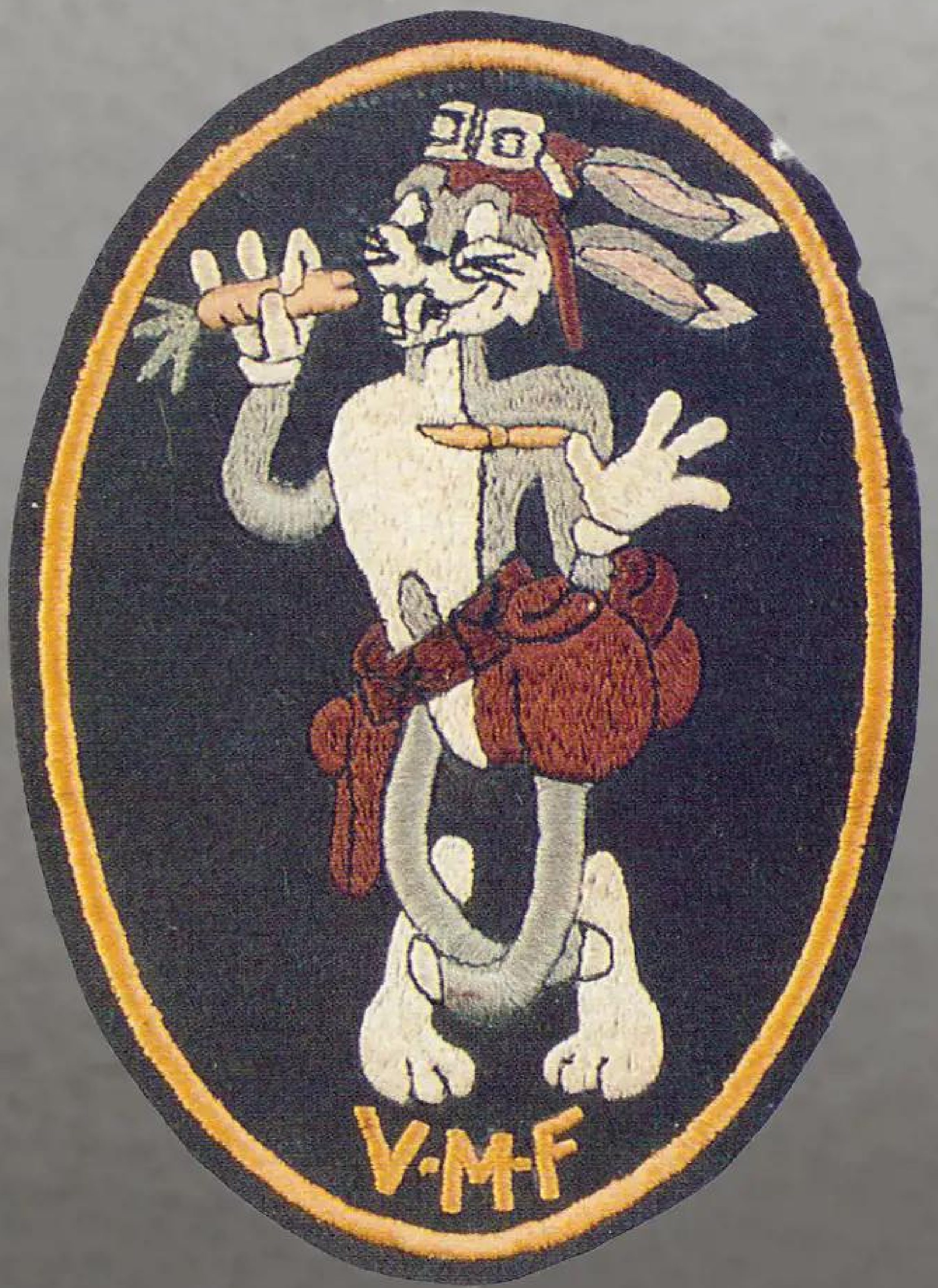
Examining the unit insignia on the Bf 108.

WILDCAT WARRIORS

FACING HEAVY ODDS AND OPERATING UNDER TERRIBLE CONDITIONS, THE GRUMMAN F4F WILDCATS OF VMF-121 SET OUT TO DESTROY THE JAPANESE

BY STEVE BLAKE

Wildcats on patrol over Guadalcanal. Fortunately, the rugged F4F was an ideal aircraft to operate from the primitive Henderson Field. Simple to maintain, the Wildcat could meet and beat the Japanese by using its diving speed and superior armor plating.



Flight jacket insignia for VMF-121.

Heavier Than Air Marine Fighter Squadron 121 (VMF-121) is, with 210 confirmed aerial victories, the US Marine Corps' highest-scoring fighter squadron. It rose to fame during the first of its four World War II combat tours, on Guadalcanal in the Solomon Islands, during which its pilots were credited with shooting down 110 Japanese planes from 13 October through 15 November 1942. Twenty-three of them were claimed by Capt. Joseph E. Foss, who was awarded the Medal of Honor for his exploits over that embattled island, which American forces had invaded on 7 August and would be fighting on until the following February.

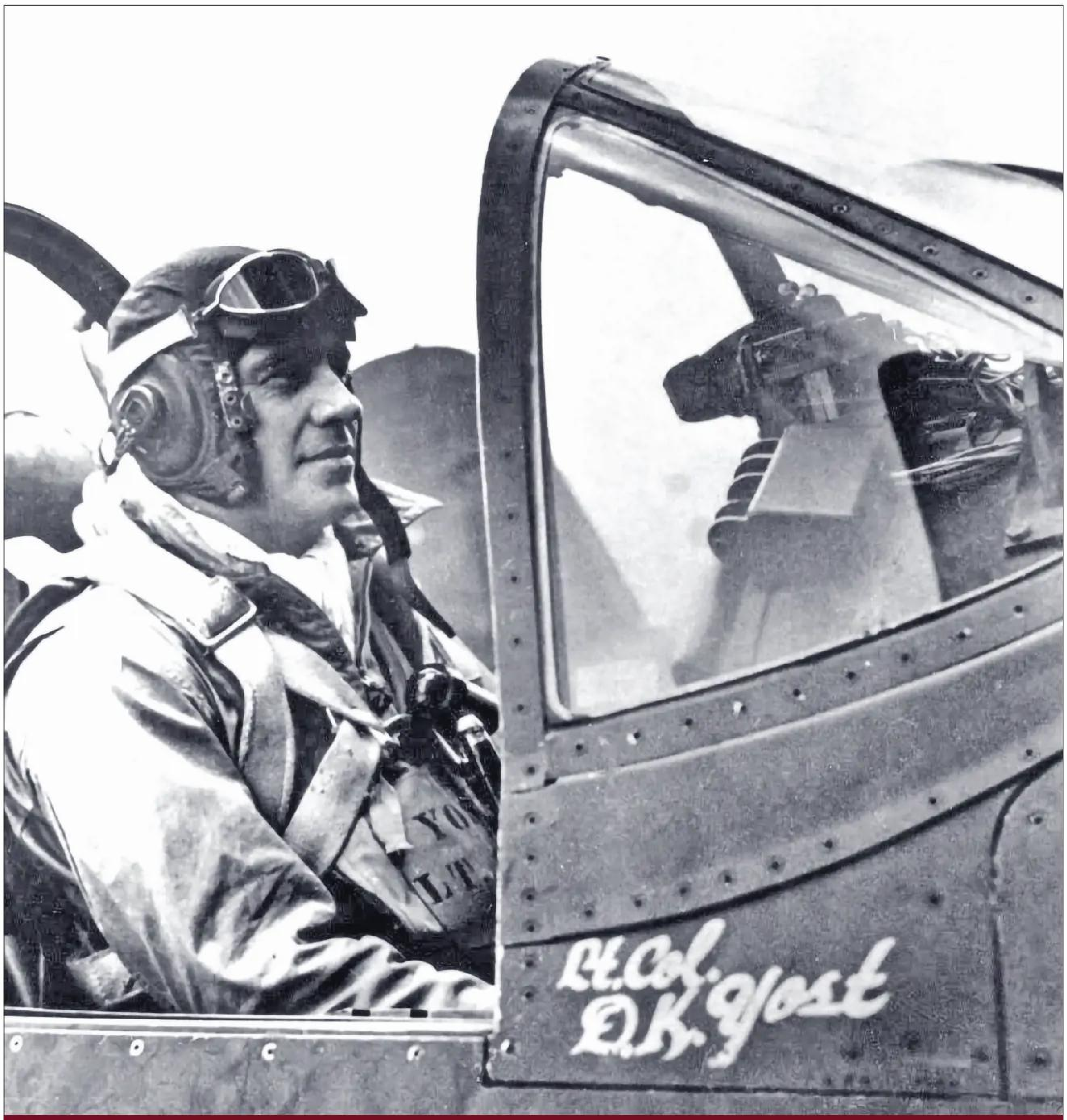
The Marine Corps fighter pilots who were flown into Henderson Field on *Cactus* — the Allied code name for Guadalcanal — in a Douglas R4D transport on the early morning of 23 December 1942 were notified immediately upon their arrival that they were now the new VMF-121 and would be flying its second combat tour from there. (Its veterans most often referred to the island as "The Canal.") Until very

The Grumman Wildcat was in full production when the Japanese attacked Pearl Harbor. These USMC Wildcat fuselages were photographed at the factory prior to mating with their wings.

Famed Grumman test pilot Corkey Meyer demonstrates how the life raft in the Wildcat worked. However, since the plane would sink in literally seconds it would have been doubtful if a pilot would have time to deploy the raft.

121F-5
121F-4
The first F4F-4 Wildcats for VMF-121 were delivered from the factory in full squadron markings. Note how each aircraft came with a canvas protective cover for the engine.

An F4F-4 is lifted aboard the USS *Long Island* (ACV-1) from the USS *Kitty Hawk* (APV-1) at Fila Harbor, New Hebrides, on 28 August 1942. The Wildcat was *en route* to Guadalcanal as part of the second group of Marine aircraft to be based at Henderson Field. Note that the F4F's markings appear to be taped over. The national insignias may have had the red circle so it is possible they were taped over to prevent air attack by friendly aircraft.



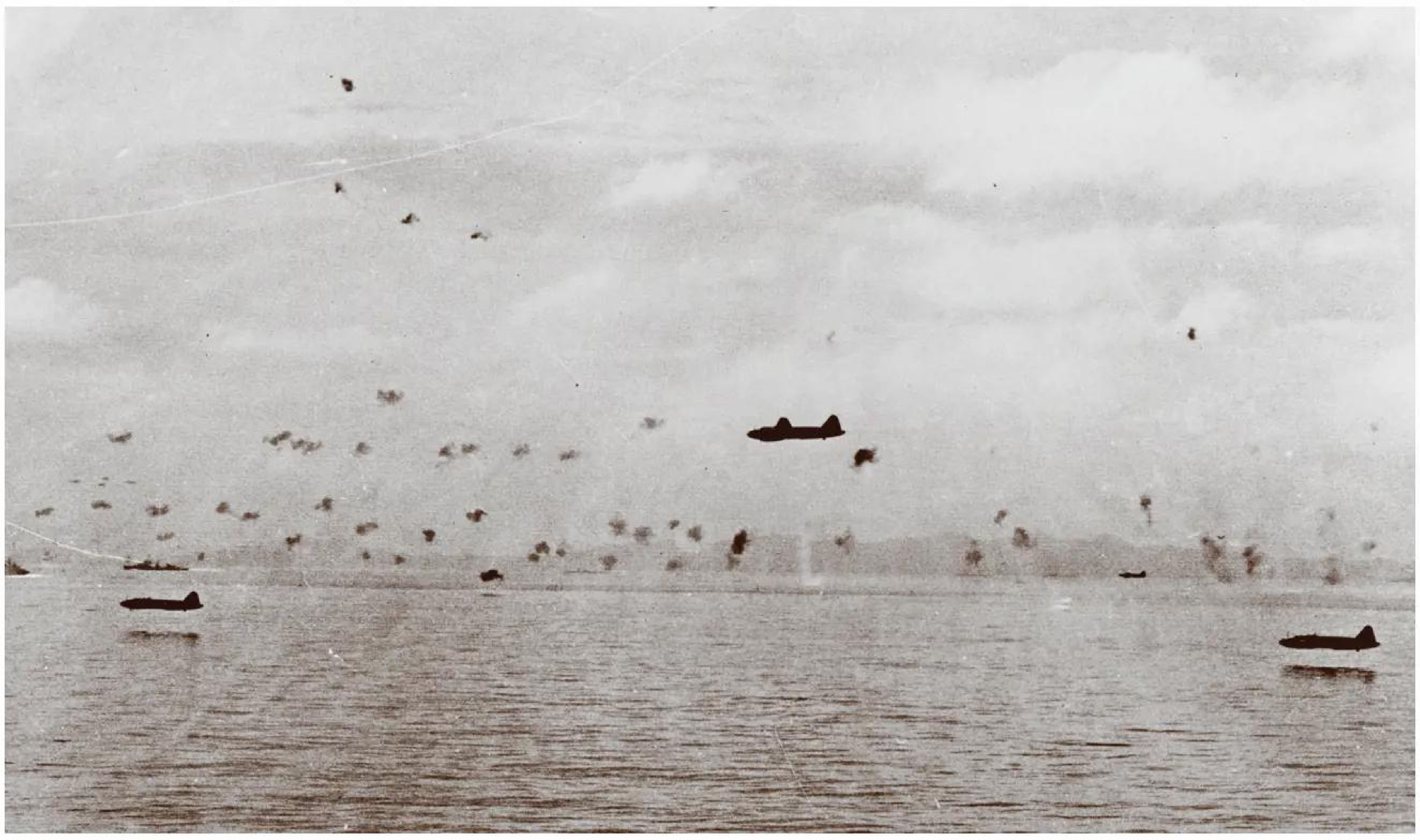
Thirty-three-year-old Lt. Col. Don Yost in the cockpit of a VMF-351 Corsair aboard the USS *Cape Gloucester*, with which he added two victories over Japan in 1945 to the six he had scored as CO of VMF-121.

recently they had all been members of either VMF-111 or VMF-211. The latter unit had been based at Palmyra Atoll, in the South Pacific midway between Australia and the US, since April, but in September many of its pilots were sent to Hawaii to provide the nuclei of four new USMC fighter squadrons. However, due to the immediate, desperate need for fighter pilots at Guadalcanal they were instead returned to the South Pacific, arriving on the island of Samoa, northeast of New Zealand, in late November. There they joined VMF-111, commanded by Maj. Donald K. Yost, which had been based on Samoa since March. Thirty pilots of the two squadrons were flown to Espiritu Santo, the largest island in the New Hebrides, southeast of the Solomons, in mid-December and then on to Guadalcanal. As the senior pilot, the 31-year-old Yost was given command of the new VMF-121.

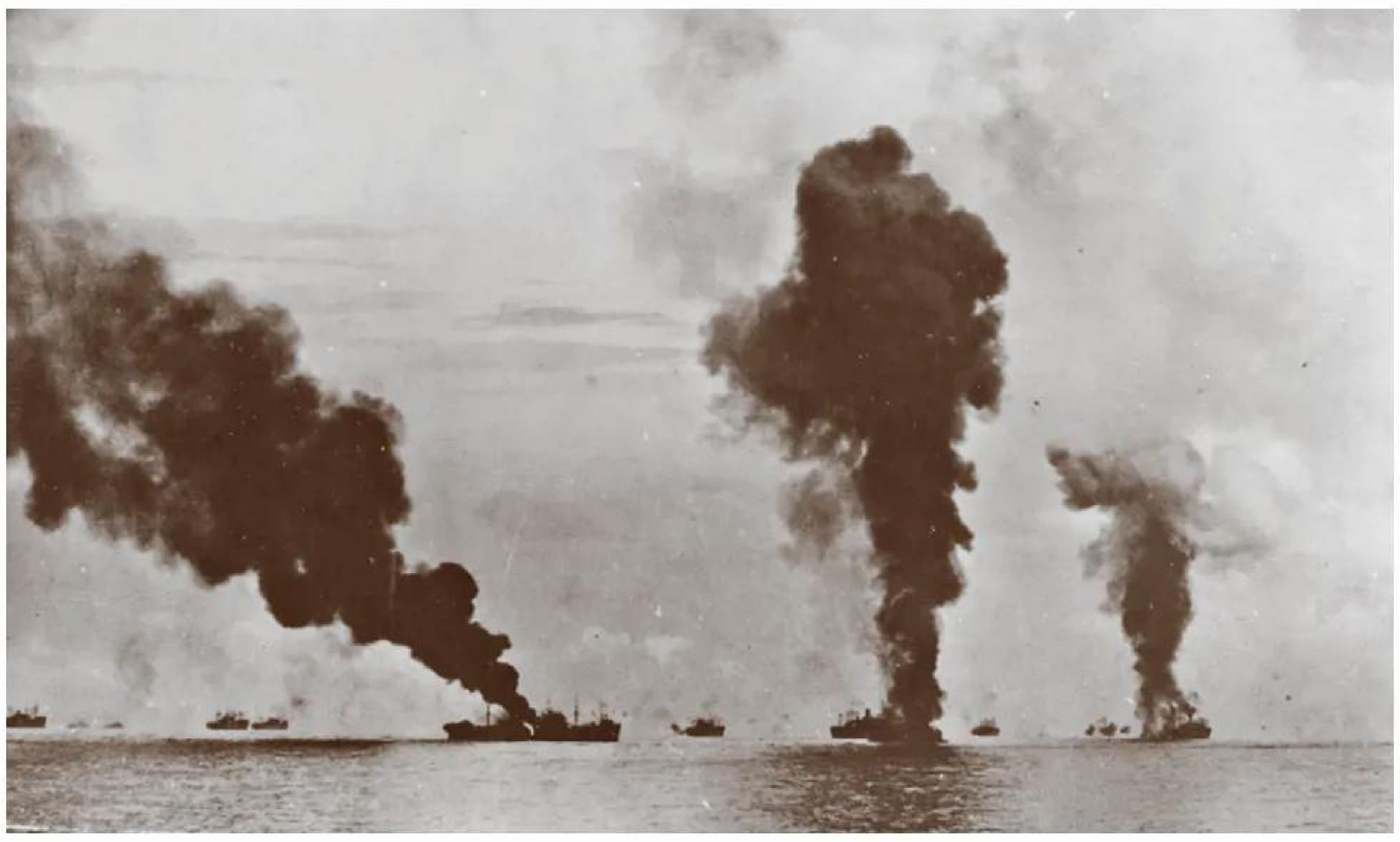
Among the other former VMF-111 pilots who were assigned to the squadron were Captains Harry J. "Rocky" Coleman, John P. McMahon, Joseph Hunter Reinburg (who went by his middle name), and Philip R. White; Lieutenants Joseph E. Cannon, Youell L. "Joe" Crum, Warren E. Fisher, Jack B. Gifford, Alexander M. "Sandy" Hearn, Elton "Shorty" Mueller, Robert L. "Pete" Petersen, and Frank J. Williams Jr. — plus Marine Gunners (MG) Joseph F. Moravec and Benjamin B. Wisner. The new unit's VMF-211 veterans included Captains Jack Foeller, David C. Andre, and Francis E. "Effie" Pierce; Lieutenants Irwin W. Carter, Herbert H. "Trigger" Long, and William M. Lundin; and MG Edward L. "Ski" Zielinski. (Early in WWII there were many enlisted [non-commissioned] pilots in the USN and the USMC. The unique Marine Gunner rank was equivalent to an Army warrant officer.)

Of the above-mentioned pilots the only one with previous combat experience was Capt. White, who had been VFM-111's executive officer. White was a Grumman F4F Wildcat pilot with VMF-221 who participated in the huge air battle near Midway Island on 4 June, during which he shot down a Japanese Naval Air Force (JNAF) Aichi D3A dive-bomber (which later received the Allied code name "Val") and damaged another.

Also joining (actually *rejoining*) the squadron later were eight surviving pilots of the "old" VMF-121, after they had enjoyed some R&R in New Zealand following the completion of their first six-week combat tour on The Canal. They included Capt. Joe Foss and, with one exception, were members of the original VMF-121's two divisions (which is what the USN calls four-plane flights) that he had led, which were referred to — at least for public relations purposes — as his "Flying Circus." These other veteran pilots were: Lieutenants Oscar M. Bate Jr., William B. Freeman, Thomas W. "Boot" Furlow, Roger A. Haberman, Gregory K. Loesch, William P. Marontate, and Frank



The Japanese quickly opposed the American invasion fleet heading to Guadacanal. In this photograph, a trio of Japanese Betty bombers carrying torpedoes head towards the American ships. Note how two of the aircraft are flying just feet above the ocean and through heavy anti-aircraft fire.



The invasion forces would pay a price. In the center of the photo is the burning USS *George F. Elliott* (AP-13) that had been hit by a crashing Betty. The two smoke plumes on the right are from shot-down Betty torpedo-bombers.

Japanese crew loads a Type 91 torpedo onto a Betty for a raid on the American fleet.

H. Presley, who was the aforementioned exception. They arrived back on *Cactus* about a week after the new VMF-121 had been organized there, Foss, Freeman, and Loesch on 1 January 1943. It had been decided to retain these men for another tour to provide the squadron with more combat experience — of which they had a lot, having already scored a total of 57.5 confirmed victories.

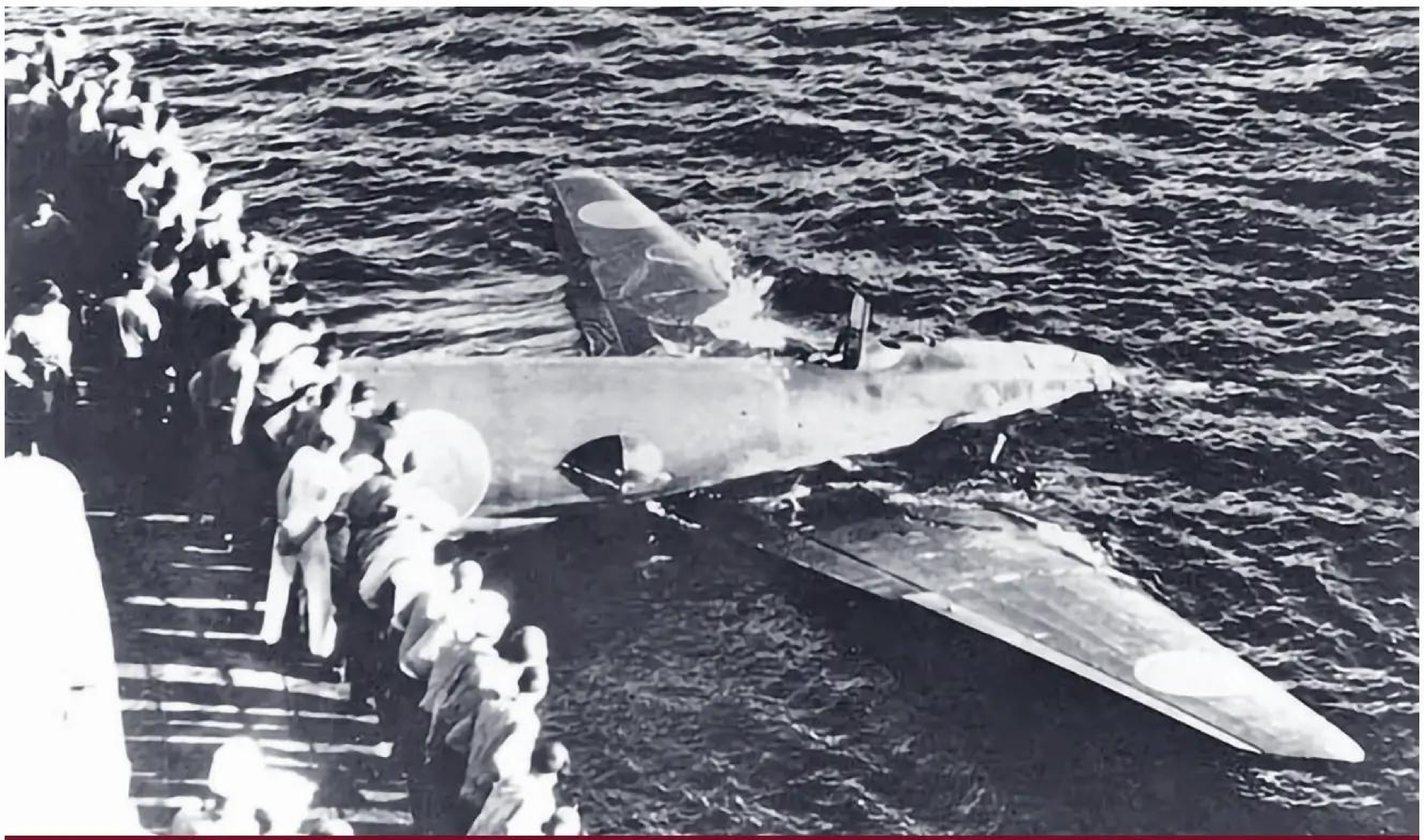
Meanwhile, the squadron's new pilots — operating from the also new Fighter Two airstrip that was now part of the Henderson Field complex — had wasted no time in making their presence known to the enemy. While the original VMF-121 had mostly flown local missions defending the American forces on Guadalcanal from enemy air raids, the Allies were now on the offensive in the Solomon Islands, and their air forces were regularly targeting enemy ships and facilities on Japanese-held islands farther up "The Slot," the north/south channel running through the center of the Solomons.

Major Yost led a division of F4F-4s to Munda Point on New Georgia Island, northwest of Guadalcanal, on the afternoon of their arrival on 23 December. The enemy airfield there was strafed and seven planes were left burning on the ground. Some JNAF Mitsubishi A6Ms were then encountered in the air, four of which were subsequently claimed destroyed, two by Yost and one each by MG Wisner and 1st Lt. Carter. This was not without loss, however, as Wisner and Capt. Andre (who was flying F4F-4 BuNo 03534) went missing in action (MIA). Andre returned to *Cactus* on 31 December, but Wisner, it turned out, was killed, his Wildcat having crashed near Munda. Dave Andre later recalled his extremely eventful introduction to combat, starting with his arrival on Guadalcanal, shortly after exiting the transport that delivered him there:

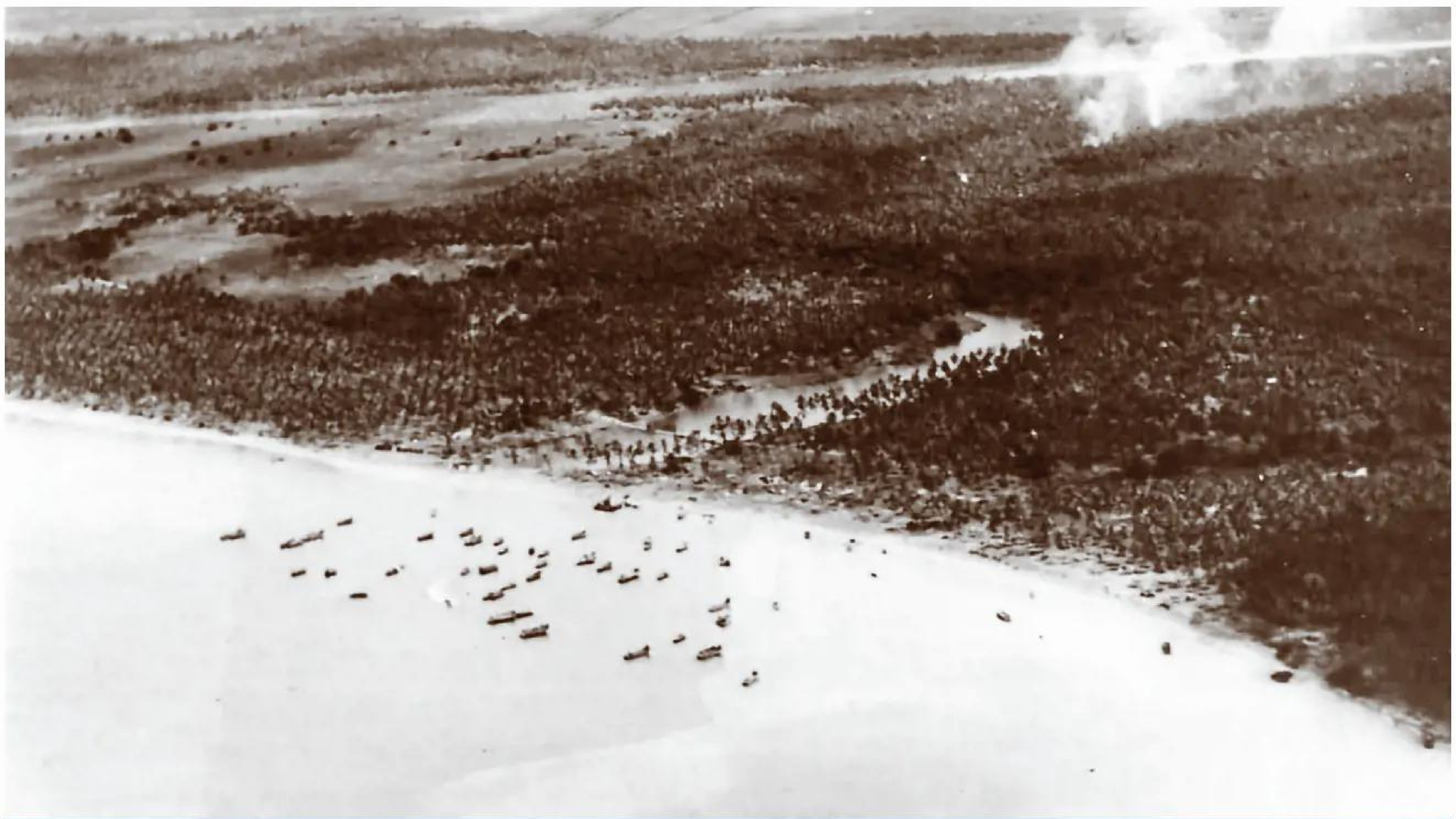
"On entering the command center, we learned that a fighter sweep/strike was scheduled for later that day to nullify a Japanese airfield at Munda. They were putting together this flight so several of us asked to go and were selected. We had waited so long and were so eager for some action that we forgot the old admonition 'don't volunteer!'

"We went to our tents, changed to flight gear, and made it back for a briefing

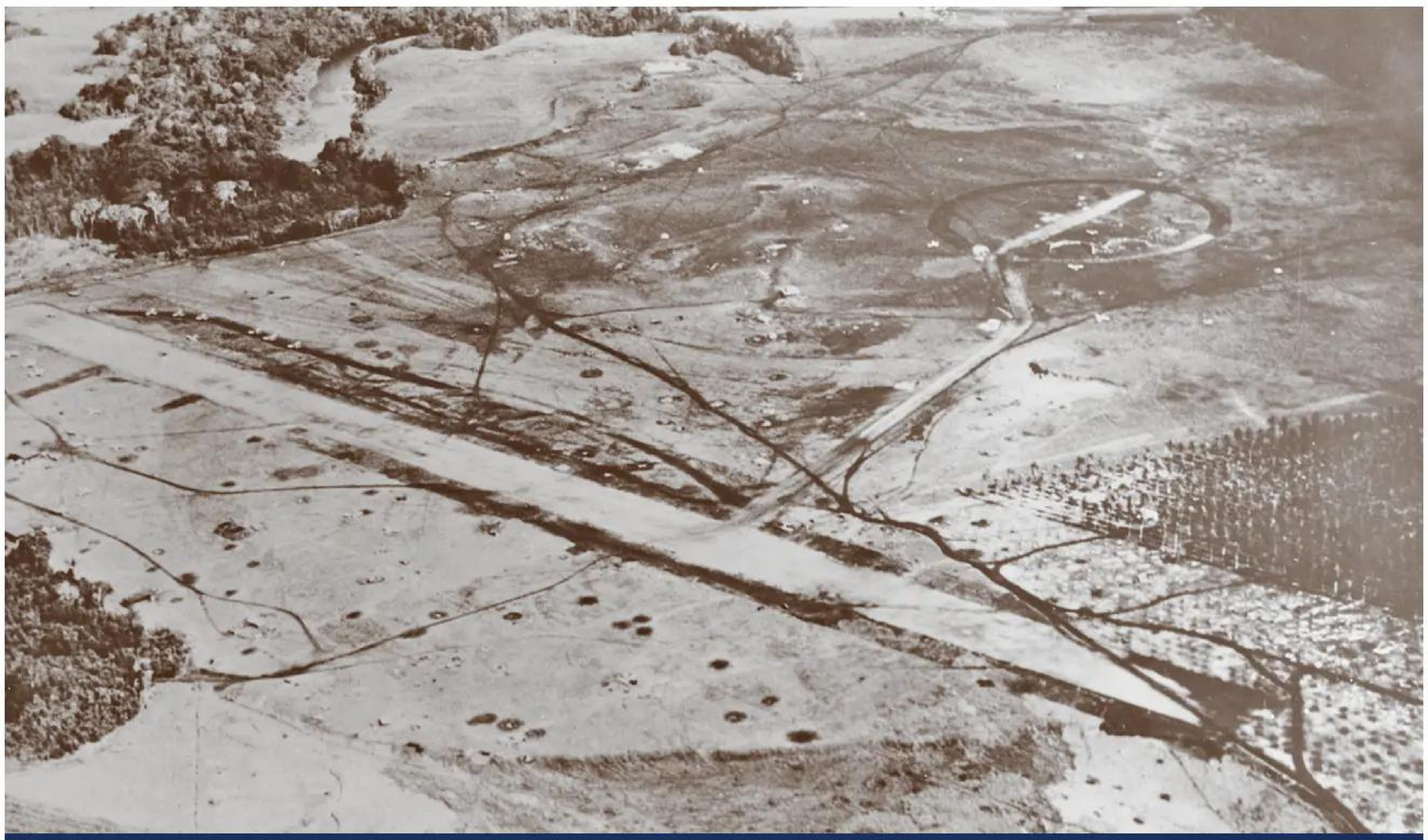
Launched at American ships, this Type 91 was a dud and washed up on the beach at Guadalcanal.



Crewmen aboard the USS *Ellet* (DD-398) view the floating remains of a Betty torpedo-bomber brought down on 8 August 1942.



Marines landing at Lunga Point. Initially, the landing was meet with light opposition. However, once the Marines advanced inland the Japanese attacked with fury.



The prize was the incomplete Henderson Field. In this view, a few aircraft have landed. Note the bomb and shell craters around the field.

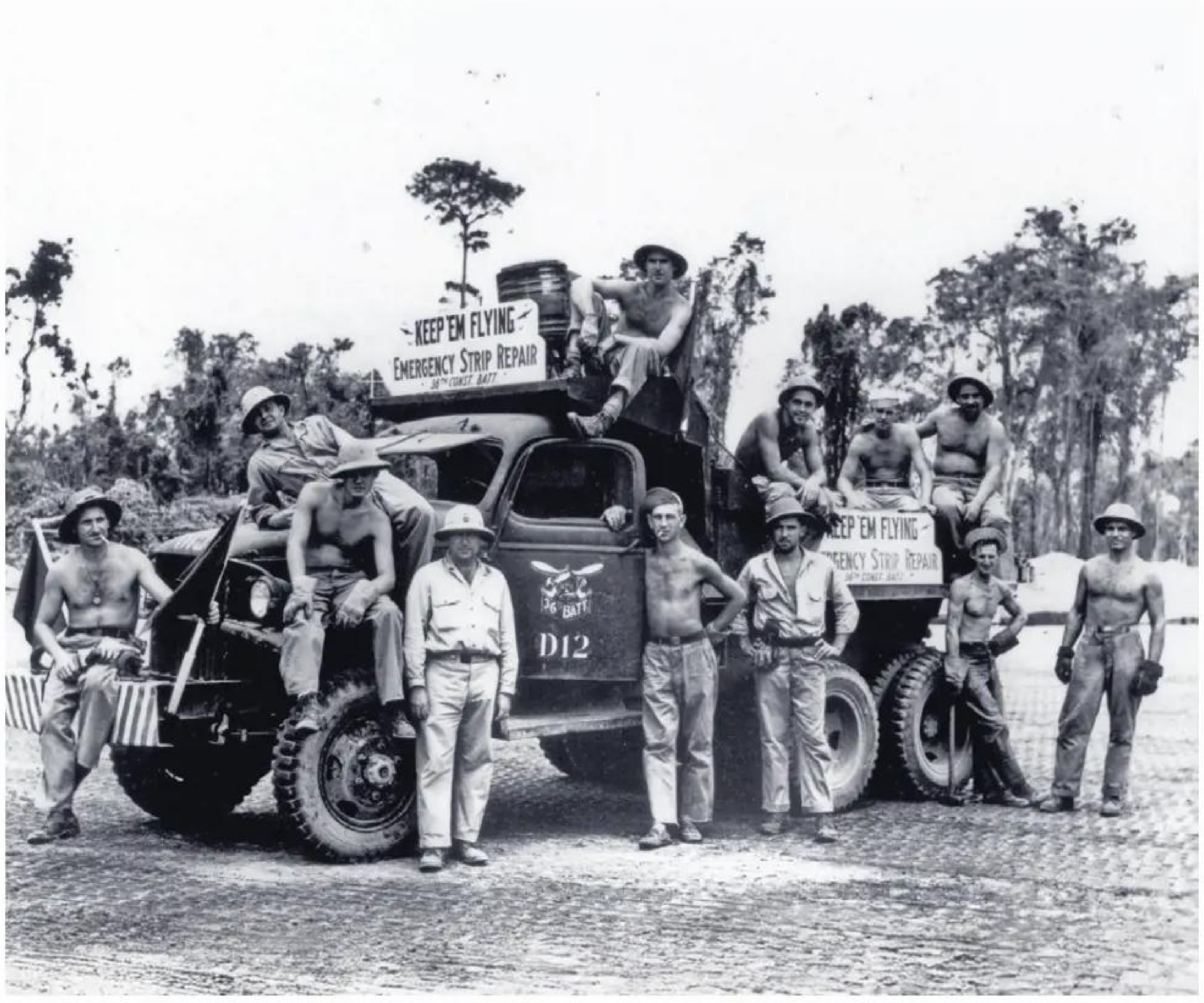
covering route, formations, and altitudes. We were also informed that there had not been any Jap fighters spotted in the area for a week, a disappointment for we newcomers who were eager for some action.

"We took off, joined in formation, and headed up The Slot to Munda, some 170 miles north. It was a clear day with blue sky and puffy white clouds — whitecaps covered the ocean below as we settled in for the flight at 10,000 feet. My wingman and I scissored lazily with the other two planes of our division [the USN calls such two-plane elements sections].

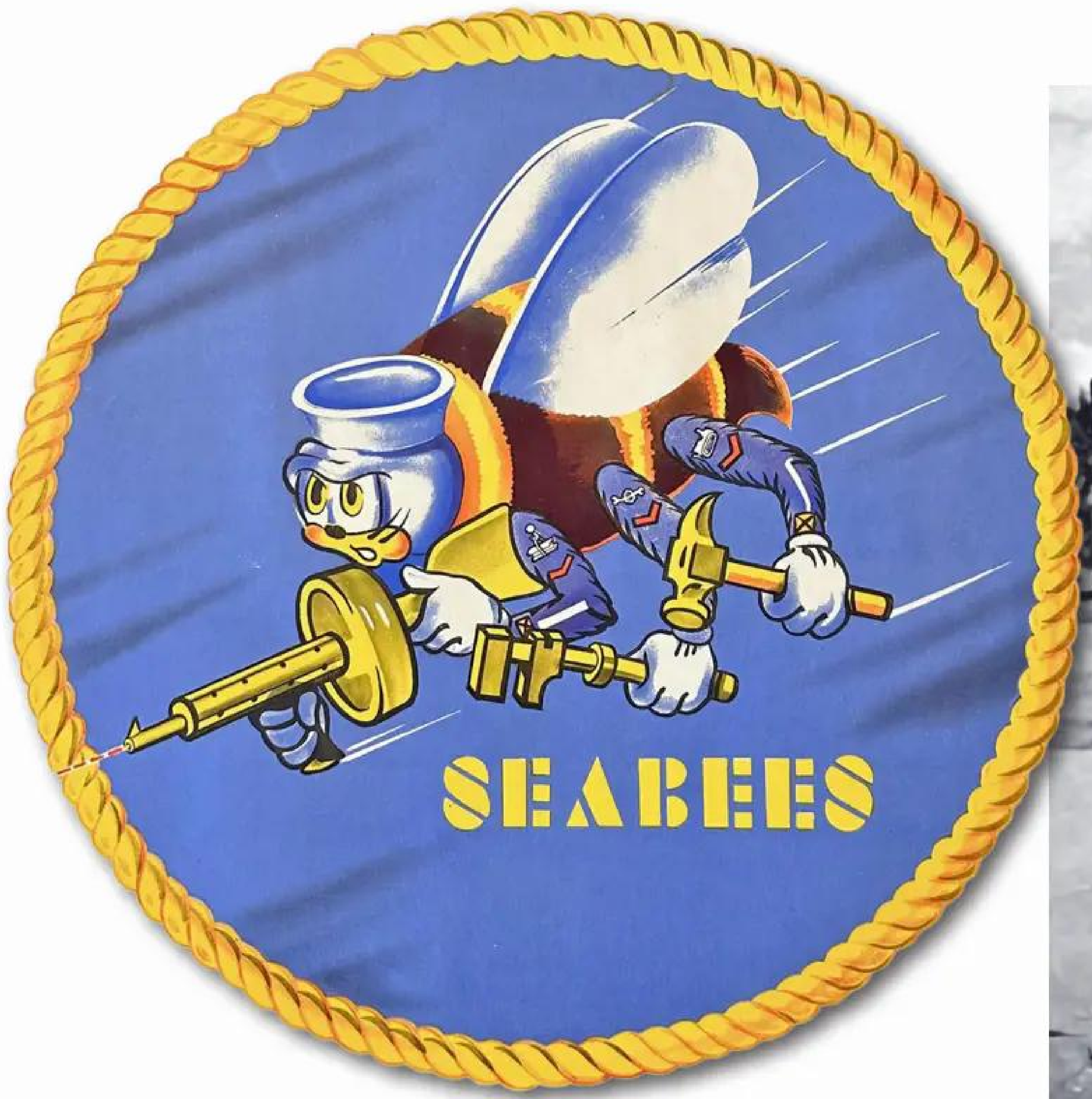
"The islands from that altitude were absolutely beautiful, and I confess that the scenery, the smooth air, and the news that there had not been Jap planes spotted for a week or so, had some of us at less than full alert.

"We flew up the east side of New Georgia Island, swinging around the north end until the airstrip at Munda came into view. Preparing for our attack, we moved into echelon for easy peel-off. Then we screamed down, strafing any Jap planes on the ground and any development or buildings. I watched my .50-calibers march through a plane on the side of the runway and silence some small caliber AA. Pulling up and away I glanced back over my left shoulder to observe the results, seeing several fires and smoke on the

As the SeaBees work to extend at improve Henderson Field, the Marines dig in to find protection from Japanese shelling and air raids.



Shortly after the Marines landed, the SeaBees of the 6th Naval Construction Battalion came ashore. They became the first SeaBees to build under combat conditions. Work on Henderson Field was immediate but it was also never-ending because of constant Japanese attack. The SeaBees created this Emergency Strip Repair Truck with all the supplies needed to fill shell and bomb holes.

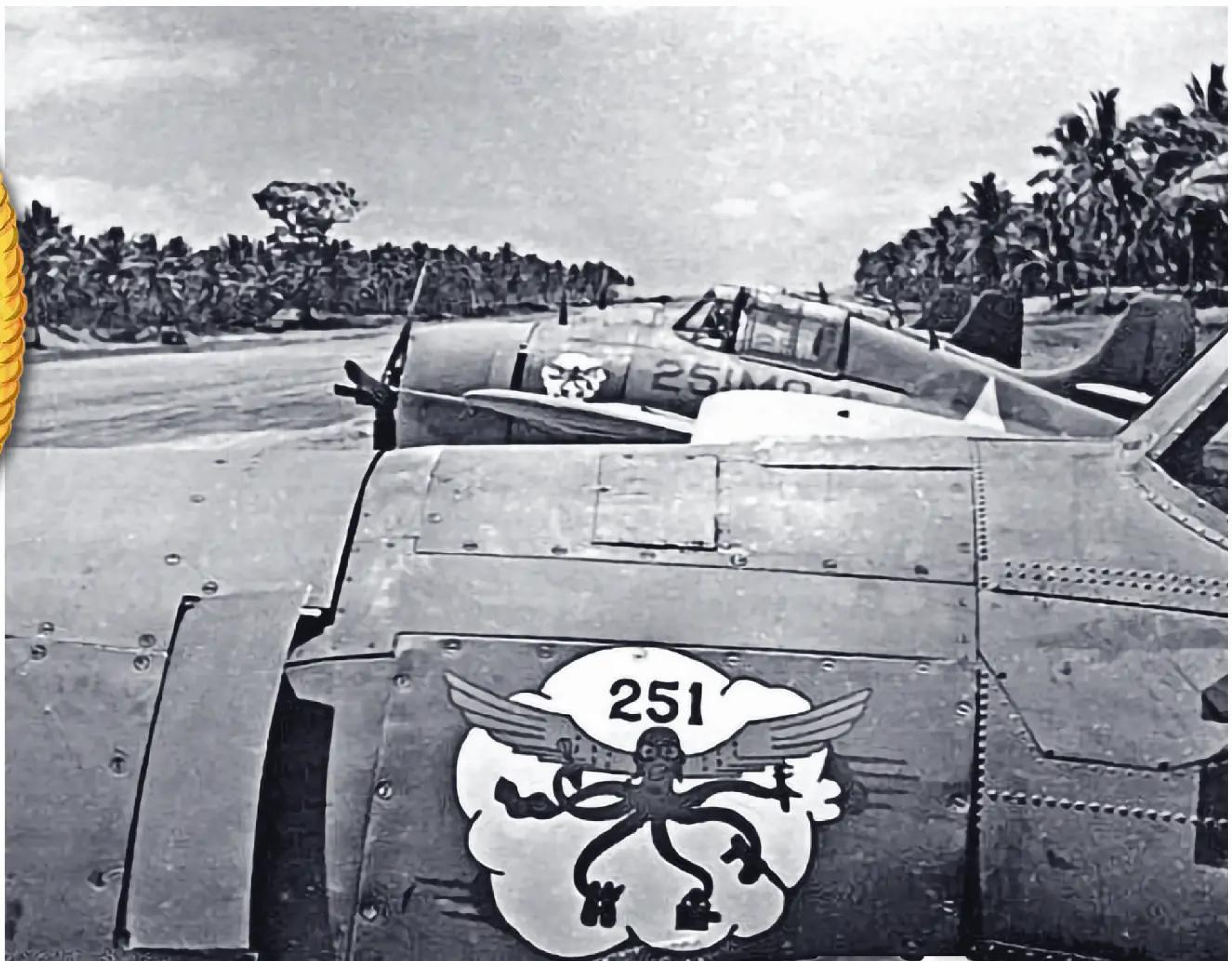


WWII SeaBee insignia.

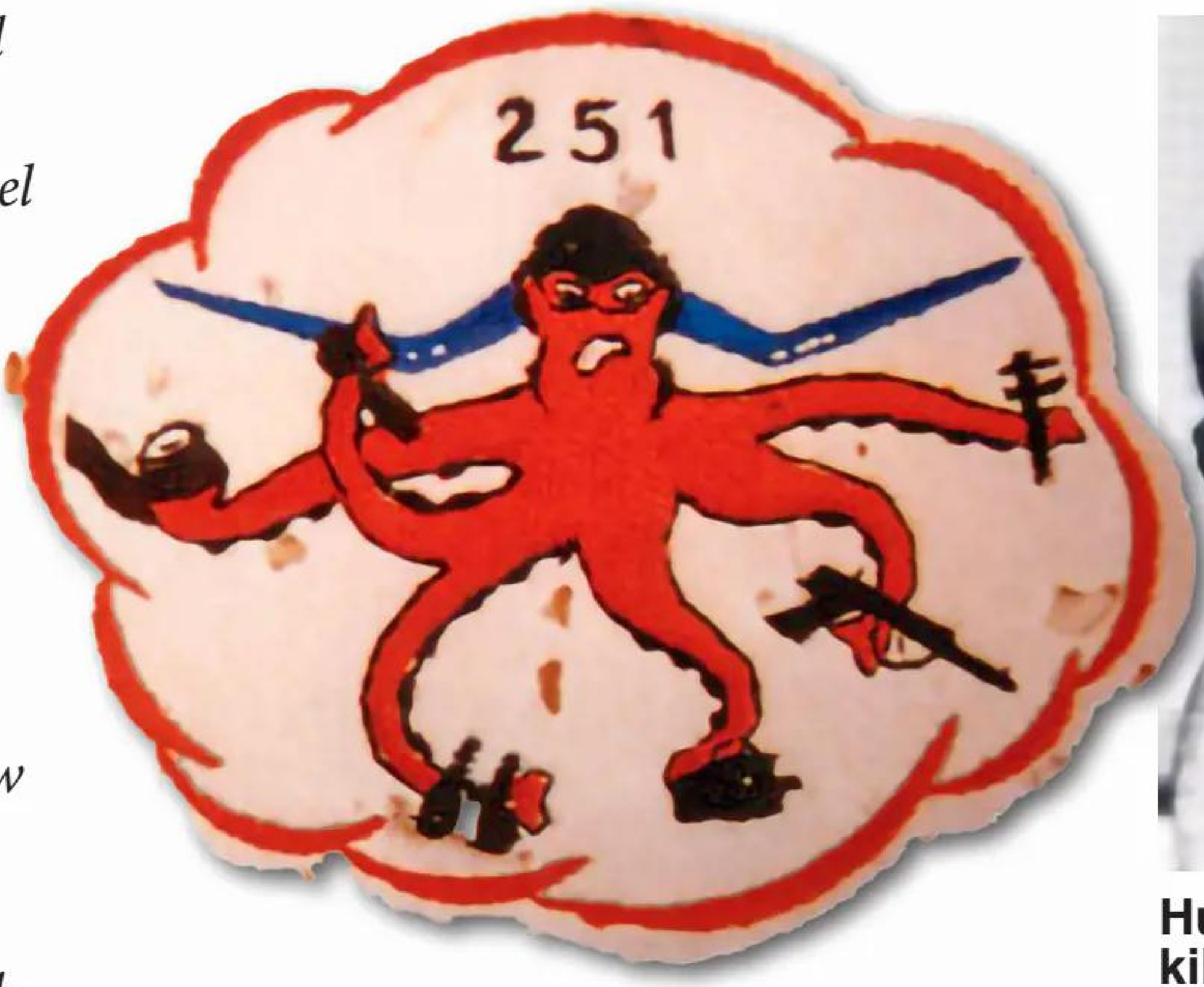
ground. I have a vivid memory of seeing a plane pulling up behind me with smoke coming from the engine area. My thought was 'That poor bastard has been hit!'

"At about that same moment the oil cooler in my wing root exploded and I heard that horrible sound of hail on a tin roof as .30-calibers chewed up my tail section, finishing against the armor plate behind my seat. A slug or piece of shrapnel struck my right leg as I instinctively kicked over hard right. It took about one second to realize that the 'poor bastard' smoking behind me was in fact a Jap fighter and the smoke from his engine area was his machine guns. Fortunately, the Jap broke off and away, with the entire episode taking a few seconds.

"With my windshield covered with oil, I knew the engine would soon seize,



Wildcats of VMO-251 displaying the squadron's unique insignia.



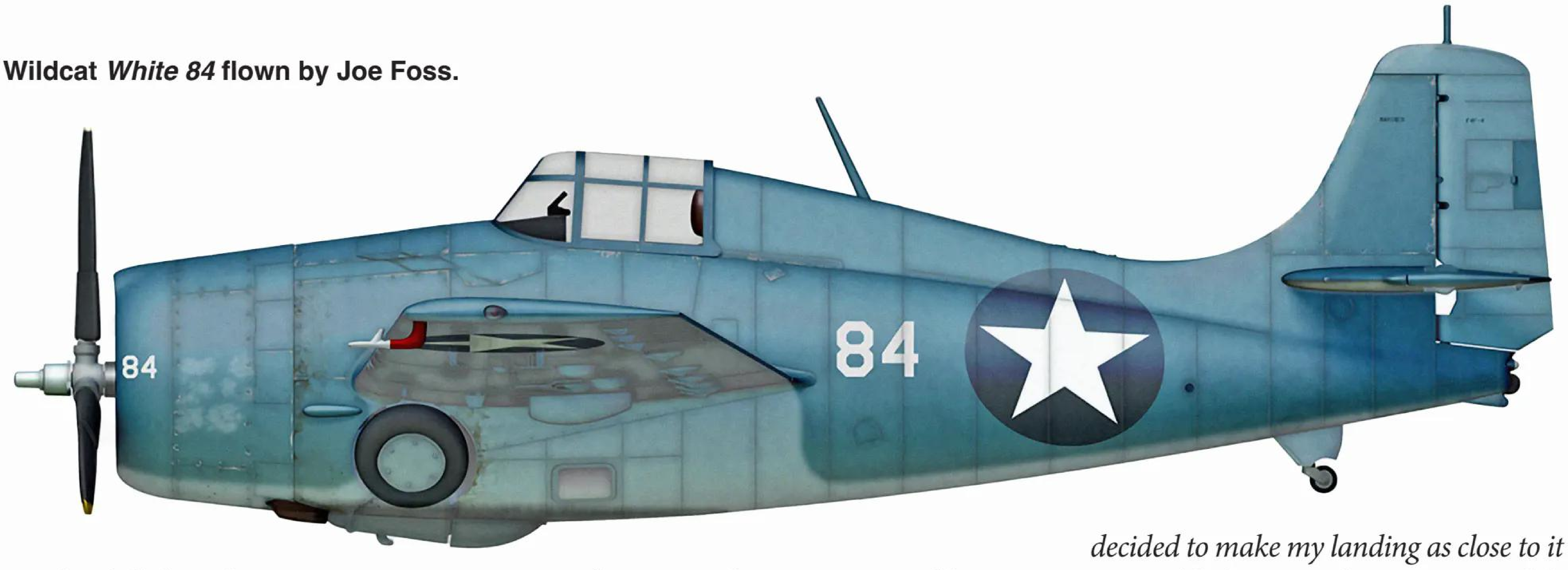
Flight jacket patch for VMO-251.

Hunter Reinburg, who scored three kills with VMF-121 and four more while flying Corsairs with VMF-122 over the Solomon Islands in 1943.

An ammunition dump explodes on Guadalcanal.

Night raids by the Japanese were common after the Americans began operating from Henderson.

Wildcat *White 84* flown by Joe Foss.

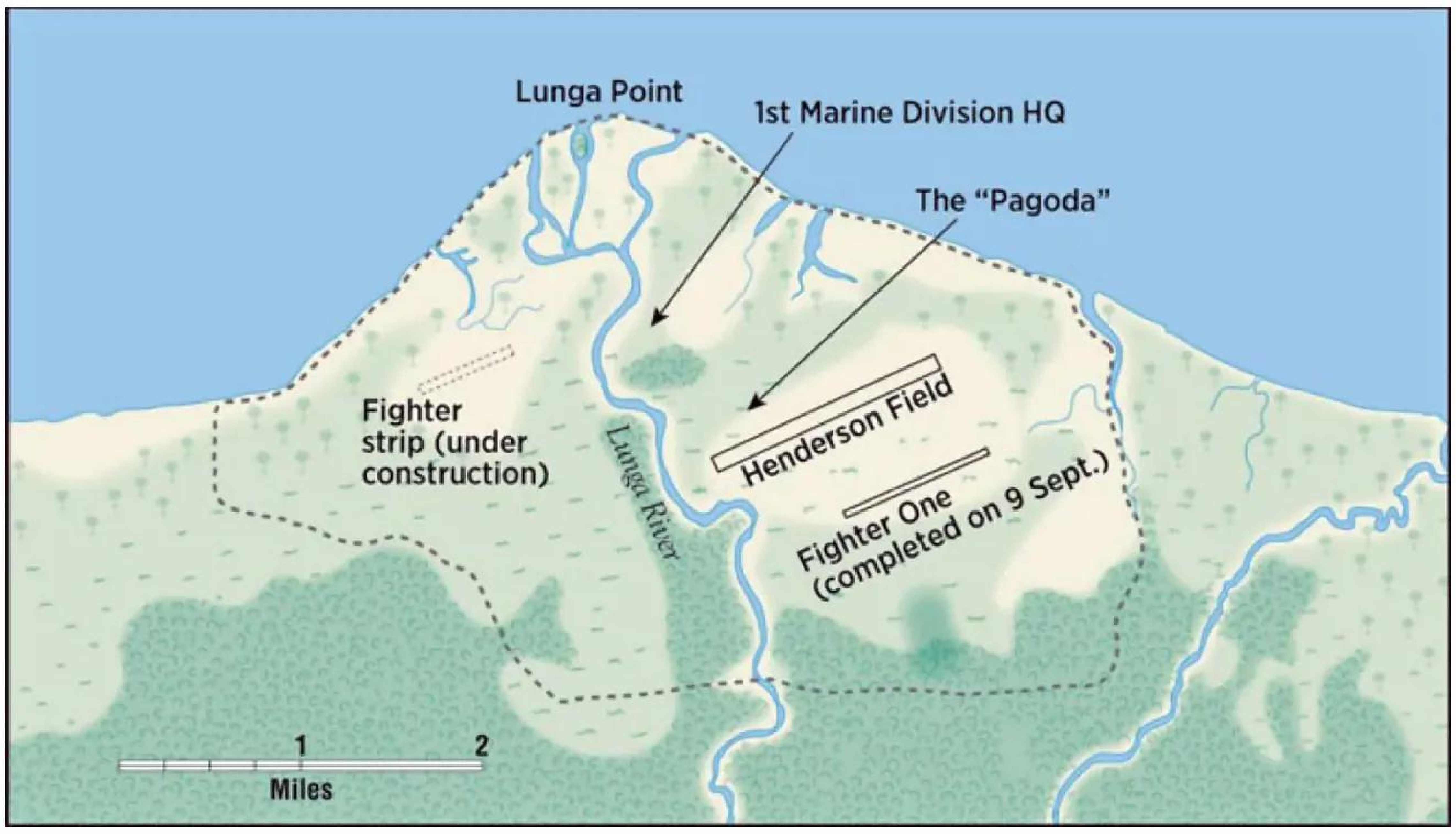


so I hit full throttle in an effort to get as far away as possible from the airfield. We knew that the Japanese were shooting parachutists so we never jumped unless on fire or so damaged we could not remain airborne. My objective was to get over the ocean where I might affect a dead-stick landing.

"Sure enough, my engine quickly stopped with a thump while I was at about 2000 feet, away from the airfield, over water and moving at a good speed. I unhooked my chute, slid back my cockpit cover, prayed to God for his care, and began to concentrate on stretching my glide as far as possible. There was a very small island about two miles off the big island and I decided to make my landing as close to it as possible, keeping it between me and the Munda airfield. At about that time it really hit me that I was in serious trouble.

"The F4F, unlike the later F4U with its inverted gull wing acting like water skis, did not make a 'good' water landing. We all operated on the premise that the pilot had no more than 15 seconds to exit the plane before it went down. With this in mind, I brought the plane in a little fast, dragging the tail wheel in stall until a full stall was followed with a sudden stop, big splash, nose-over to vertical position in the water, and started to sink. Slipping my straps, I dived out into the water and paddled away while watching my plane disappear in a matter of seconds."

Some 83 years after the invasion, Americans must never forget the cost. Dead Marines were photographed where they fell while fighting a Japanese charge.

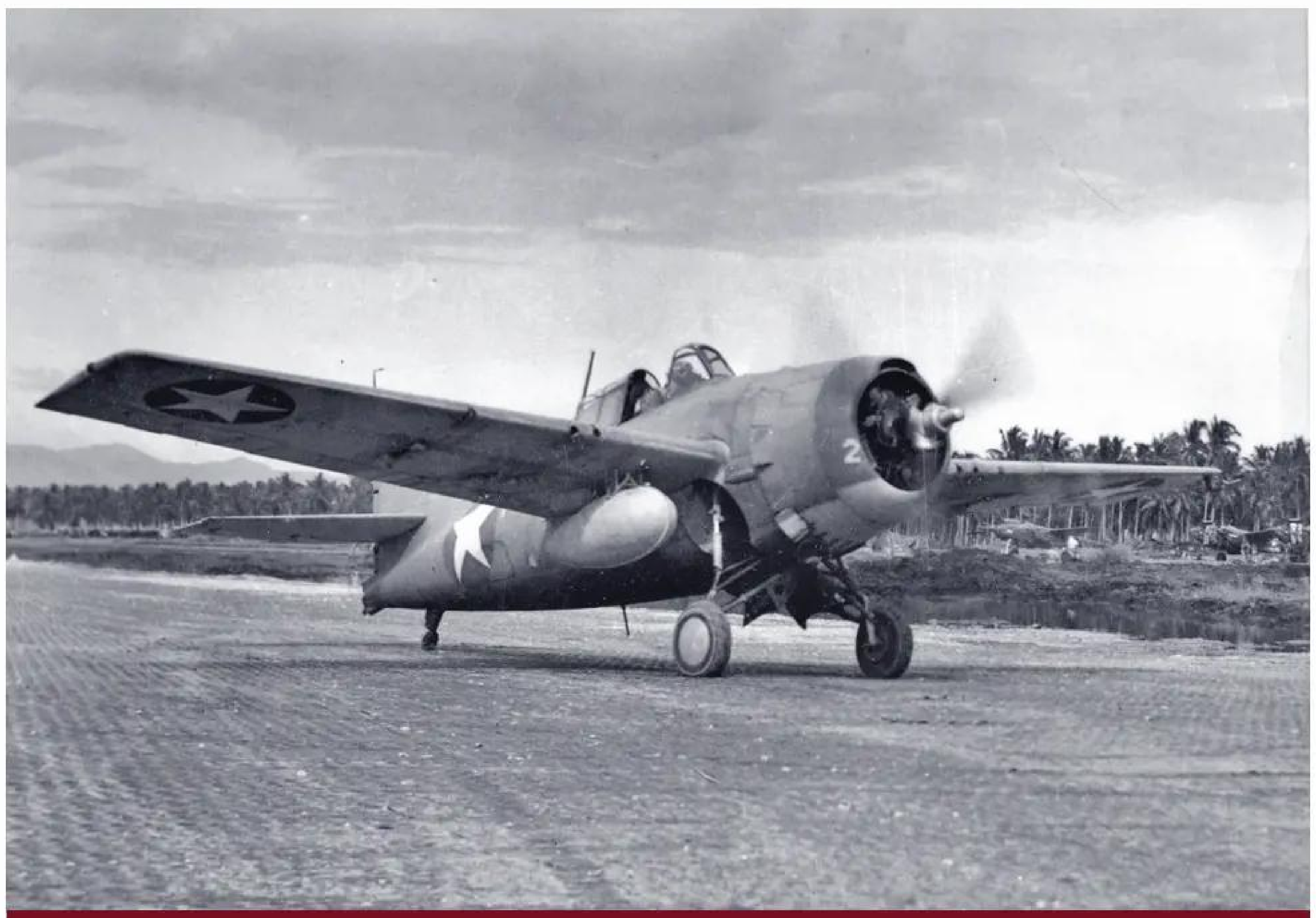


Map showing Henderson Field and the other strips being built by the SeaBees in October 1942.

Despite his injury, Andre — who fortunately was an excellent swimmer — made his way to that tiny island, on which he hid for the next four days. He remembered that, "Each day I could hear our boys bombing Munda and I could see them high above as they pulled up and headed back home to Guadalcanal. I made no attempt to signal them, although the urge grew each day, for fear the Japanese, who were only two or three miles away, might come after me." On the fourth day he was discovered there by some friendly natives and four more days later he was back at The Canal, after some further adventures.

The squadron was involved in an even bigger fight the following day, Christmas Eve. Early that morning, Maj. Yost led three other F4Fs, piloted by his wingman, 1st Lt. Kenneth J. Kirk Jr. (a member of VMO-251), 1st Lt. Cannon, and MG Zielinski, on an escort for nine USMC Douglas SBD Dauntless dive-bombers to Munda. The Wildcats provided them with high cover at 16,000 feet and eight

Windsock up, Wildcats begin arriving at Henderson Field.

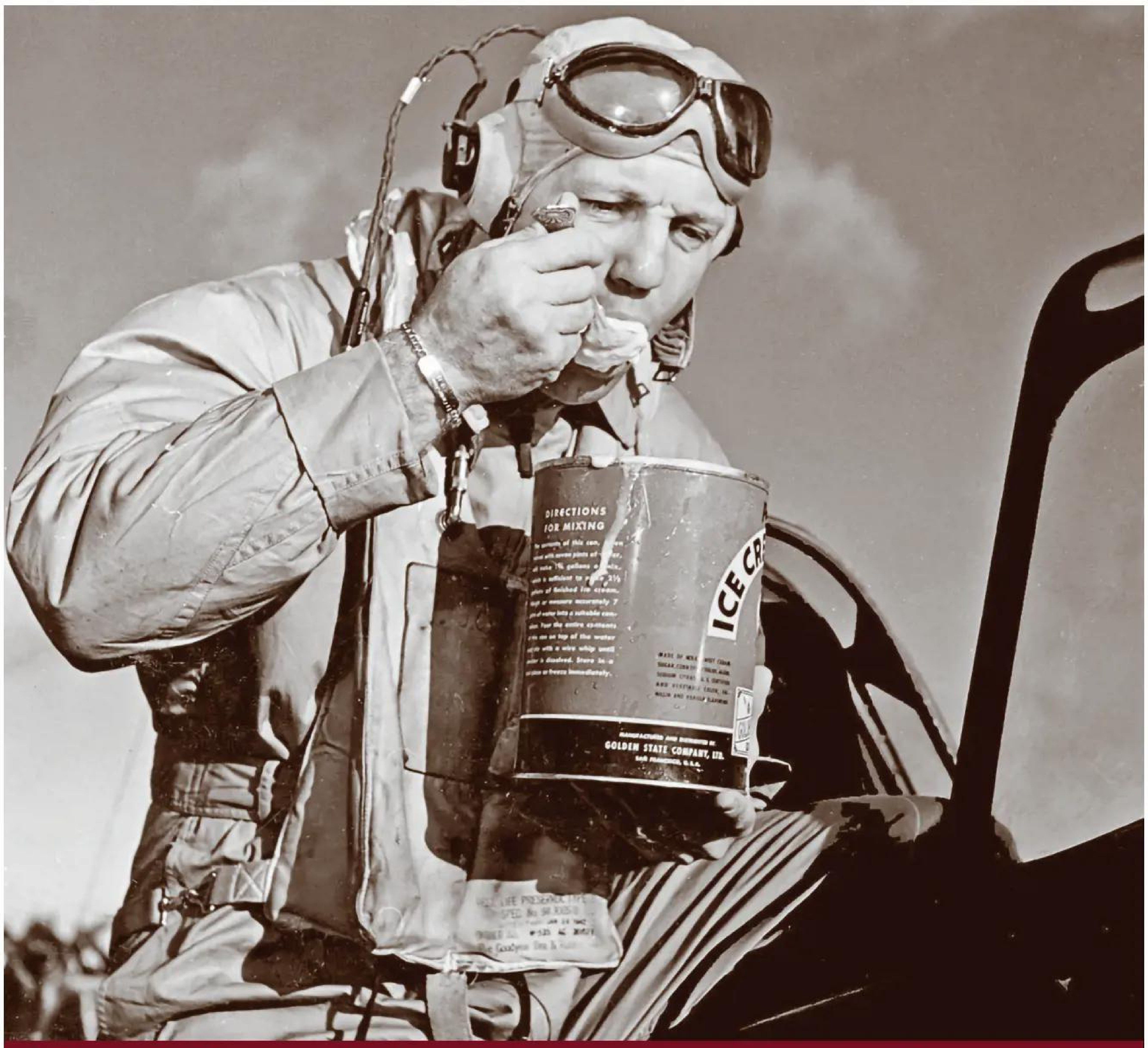


A VMF-121 F4F taxis in on the newly-laid Pierced Steel Planking (PSP). Note the underwing drop tank.

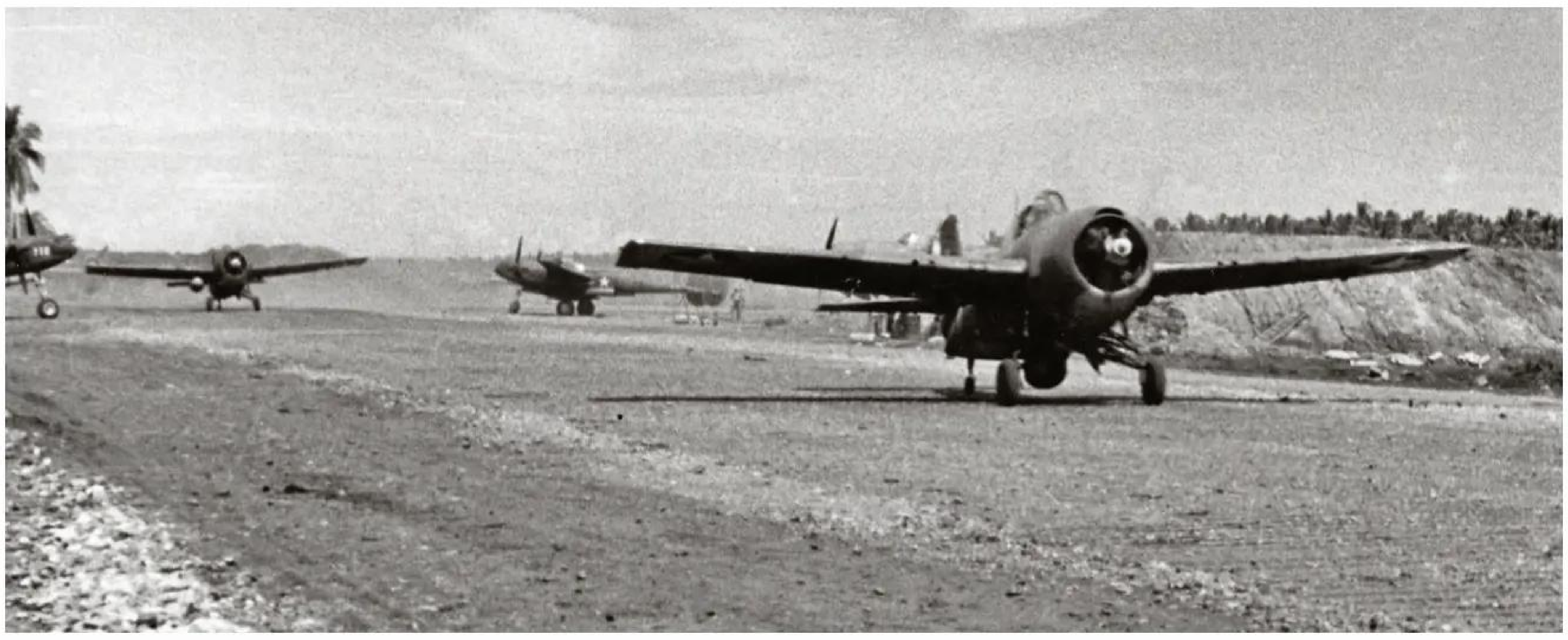
Bell P-39 Airacobras of the US Army Air Forces' (USAAF) 12th Fighter Squadron (FS) with their intermediate cover at 12,000. The dive-bombers were difficult to escort due to their relatively slow speed, and the fighters had to weave continuously to stay with them.

The F4F pilots followed the SBDs in their dive on the airfield from 10,000 feet, in the process shooting down the four Zeros that were in the air over Munda. These A6M pilots, of the JNAF's 252nd *Kokutai* (Air Group), were attempting to provide protective cover for their comrades on the runway below them, where two dozen more Zekes (including some from the 204th *Kokutai*) were lined up for takeoff. At least ten of the latter did manage to take off amidst the bombs and bullets but most of them were subsequently shot down by the American fighters. The other Japanese pilots were equally unfortunate, many of them being blown to bits on the ground by the Dauntless' bombs or shot to pieces by the strafing F4Fs' guns along with their planes. All four of the Wildcat pilots scored in the air, Yost being credited with shooting down four of the Zekes (which made him an ace), Kirk with three, Cannon with two, and Zielenski (flying F4F-4 BuNo 11798) with one. The P-39 pilots claimed four more — plus two as probably destroyed — for a total of 14 airborne e/a (enemy aircraft) destroyed.

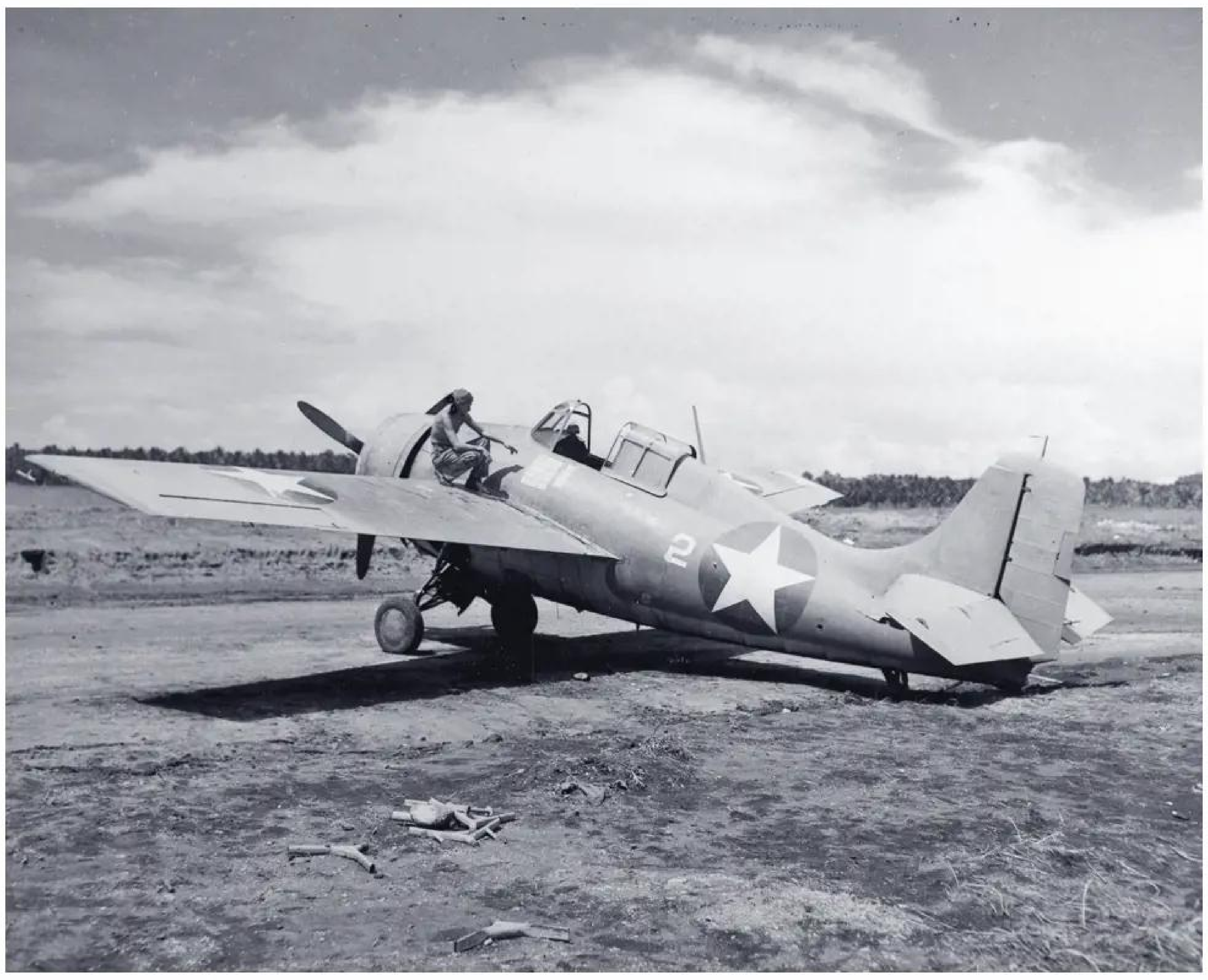
Ed Zielinski had a very close call in this fight. He downed his Zero during the initial dive with the SBDs, and after their strafing and then their climb-out he and the other Wildcat pilots went into a Lufbery Circle to protect both the bombers and themselves from the



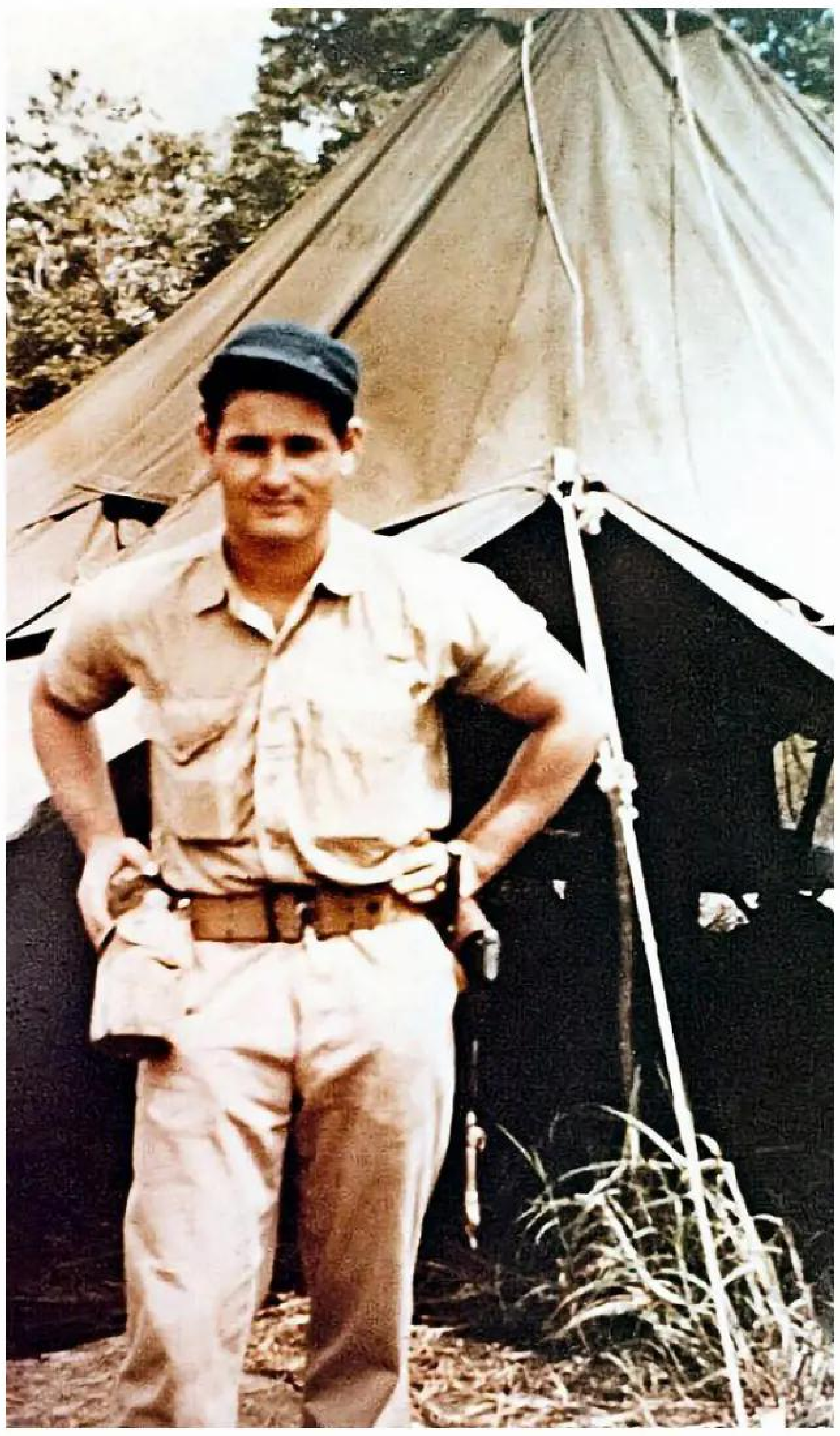
J. Hunter Reinburg got the idea of mixing contents for ice cream in a container and then placing it in a drop tank. He would then quickly fly to high altitude, let the mess freeze, and then dive back down to enjoy the treat. He said it wasn't exactly perfect but certainly better than no ice cream.



More VMF-121 Wildcats arrive. The aircraft in the foreground carries the undesirable center fuselage drop tank. In many cases, this tank would not drop and this may have contributed to the death of Lt. Joe Cannon. Note the newly arrived P-38 Lightnings of the USAAF's 339th Fighter Squadron.


Wildcat of Maj. John L. Smith of VMF-223 showing 19 Japanese victory markings parked on Henderson Field.

Joe Foss and his "Flying Circus" during VMF-121's second tour.

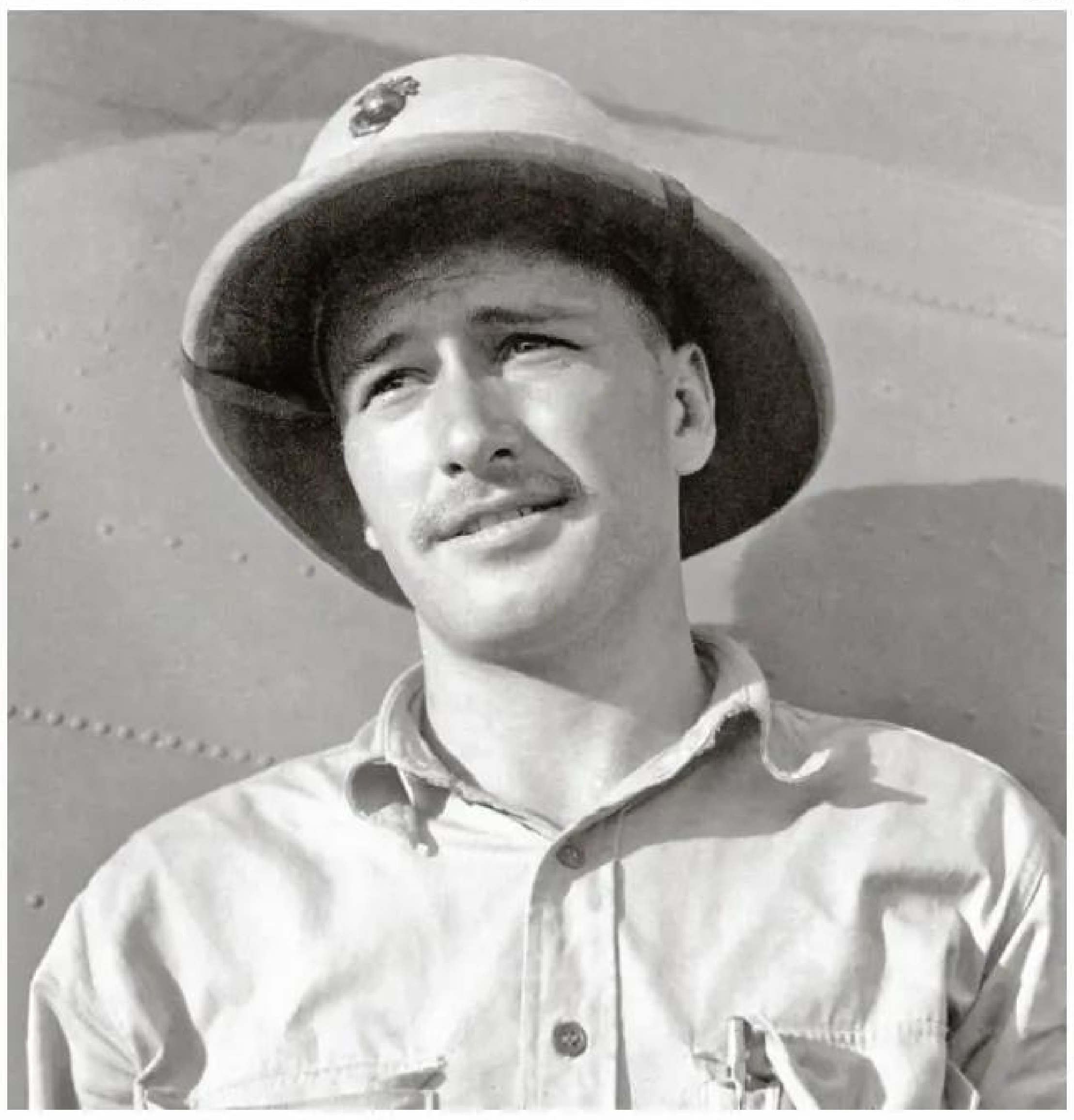

Captain Foss outside his tent in January 1943.

Zekes that had been able to take off from the Munda airfield. Suddenly Zielinski spotted one on his tail, in excellent firing position! But before the enemy pilot could score a hit on his F4F a P-39 shot him down. After landing back at Guadalcanal, he looked up the latter's pilot and thanked him profusely for saving his skin.

Zielinski had a particularly interesting back story. He had joined the USMC as a private in 1937 and two years later, now a corporal, he was accepted for flight training. After winning his "Golden Wings" as an enlisted Naval Aviation Pilot he was trained to fly dive-bombers and in August of 1941 was assigned to VMB (for Bomber) 2, which was equipped with SBDs. The squadron was based at Marine Air Corps Station Ewa on the island of Oahu in Hawaii, and on 7 December 1941 all of its planes were destroyed in the infamous Japanese attack. Zielinski was wounded in one of his feet by shrapnel, and when he was released from hospital two months later, he was reassigned to fighters, briefly joining the new VMF-212 at Ewa, flying Brewster F2A Buffalos. He was soon transferred to VMF-211, also with Buffalos, and in April 1942 his new squadron was transported to Palmyra Atoll aboard the carrier USS *Lexington*. It converted to F4Fs in July, and Zielinski and some of his squadron mates were sent back to Hawaii briefly in mid-November before returning to the South Pacific later that month — which move was followed in December by their assignment to VMF-121 on Guadalcanal.

Some VMO-251 pilots flew missions with the new squadron during the latter's first several weeks on *Cactus*. Originally an observation/photo reconnaissance unit (hence the "O"), flying F4F-3P photo-recon Wildcats, it had recently been converted to a fighter squadron, even though it wasn't officially redesignated as such until January 1945. Although based at Espiritu Santo, its pilots had been flying

A Japanese bombing attack destroyed this Dauntless.


Lieutenant Greg Loesch was credited with 6.5 victories with VMF-121's first tour and two more during its second.

Lieutenant Bill Lundin with his Wildcat. Lundin scored one victory with VMF-121 and 3.5 while flying Corsairs with VMF-122.

missions with Marine fighter squadrons on Guadalcanal since early November. In fact, they scored their first aerial victories with the original VMF-121 back on 11 November.

The squadron flew two more eventful missions to Munda before the end of the year. On the 26th, Capt. Reinburg led seven other Wildcat pilots on what was supposed to have been another SBD escort there, but the Dauntlesses failed to show up at the rendezvous. So, Reinburg decided to make a fighter sweep of its airfield instead. They spotted many Zeros on it, including two that were preparing to take off. He and the other two members of his division, Capt. Pierce and MG Moravec, made several strafing passes on them and reported setting at least nine on fire. Now either out of or very short of ammunition, they headed for home, but were followed by a couple of Zeros. The F4F pilots turned into the enemy planes and during his combat maneuvering one of the Zero pilots misjudged his altitude and crashed after hitting the water with a wingtip (for which none of the squadron's pilots received any official credit). Second Lieutenant Warren Fisher, the number four man in Reinburg's division, had somehow become separated from the rest of the squadron. He spotted three "float Zeros" (Rufes) near Munda and shot them all down.

WILDCAT DOWN

Mann with his F4F Wildcat.

On the morning of 11 November 1942, Marine 2nd Lt. Thomas H. Mann Jr. lifted off from Guadacanal for another patrol against Japanese forces. It was the anniversary of the end of the Great War, but this new war was in full heat and the odds were not on the side of the Americans. However, since arriving on the disease-infested island, Mann – who had started flying with VMF-224 before going to VMF-121 – had become an ace by blasting five Japanese aircraft out of the air.

As the patrol took off, an incoming flight of Japanese Type 99 Val dive-bombers had been sighted and the Wildcat pilots pushed their Wright radials to full military power in a climb to 18,000 feet to gain altitude over the enemy who they knew would be flying at a lower altitude. One of the members of his section then spotted the Vals flying at 12,000 feet. The Marines had gained hard-won knowledge that their best tactic was diving on incoming Japanese aircraft and that is what they did.

Two of the Vals were heading toward an American destroyer when Mann's .50-caliber bullets ripped into them that were flying in formation toward the tempting target. Both of these dive-bombers flamed before they could get near the destroyer but then Mann spotted a third Val as it had begun its dive. A fusillade of his bullets tore the Val apart and the aircraft crashed on one side of the destroyer while its bomb fell on the other side.

Mann was now at low-level, as were some of the Vals that had pulled out of their dives. He spotted one of the enemy aircraft and gave pursuit when he suddenly felt metal rip into the left side of his body. "A dive-bomber on my left turned into me and shot me down," Mann would later recall. At low-level, the pilot had no chance to take to his parachute and, as noted in the main article, the Wildcat was not an ideal aircraft to ditch. "I crashed into the ocean about halfway between Savo and Tulagi Islands," said Mann. The force of the impact catapultd the young pilot face-first into the gunsight, which was positioned just above the instrument panel. Along with other facial injuries, the impact knocked out seven of his teeth. Canopy pushed back, he quickly exited the Wildcat, which began to immediately sink.

Inflating his Mae West, Mann began paddling his way across "Ironbottom Sound" toward one of the small islands that comprised the Tulagi group off the northern shore of Guadalcanal. He managed to make it to the beach and pulled himself out of the water to lay exhausted and bleeding on the sand. At that point, two natives pulled up on the shoreline with a dugout canoe and helped him into their small boat before heading off to their village.

Once at the village, one of the natives was able to communicate with the injured pilot because he had served as a houseboy to a missionary couple. Taking the pilot into a hut, his shrapnel wounds were treated with mashed leaves and roots. Some of these were also boiled in water so he could rinse out his damaged mouth. Mann would later note that while in the village he ate better than he ever had at the Marine base. "The fruits, baked fish, and meats were like gourmet foods, even without my teeth." The remedies the natives gave him seemed to have prevented any infection from starting.

A week later, the natives came up with a very large dugout canoe and a crew of 22 rowed him back to Guadalcanal. When he arrived, his squadronmates were a bit shocked to see that he was wearing a full Japanese uniform – he had traded his flight suit to the natives for the outfit! During his absence, the pivotal Battle of Guadalcanal had taken place, resulting in an American victory and spelling the end to Japanese efforts to recapture the vital island. For his mission against the Vals, the Marine pilot would receive the Navy Cross.

Insignia of VMF-223.

Operations by the Cactus Air Force get into full swing.

The Japanese 16th and 20th Infantry Regiments launched a massive assault on Henderson Field on 25/26 October but the 7th Marines stopped the enemy.

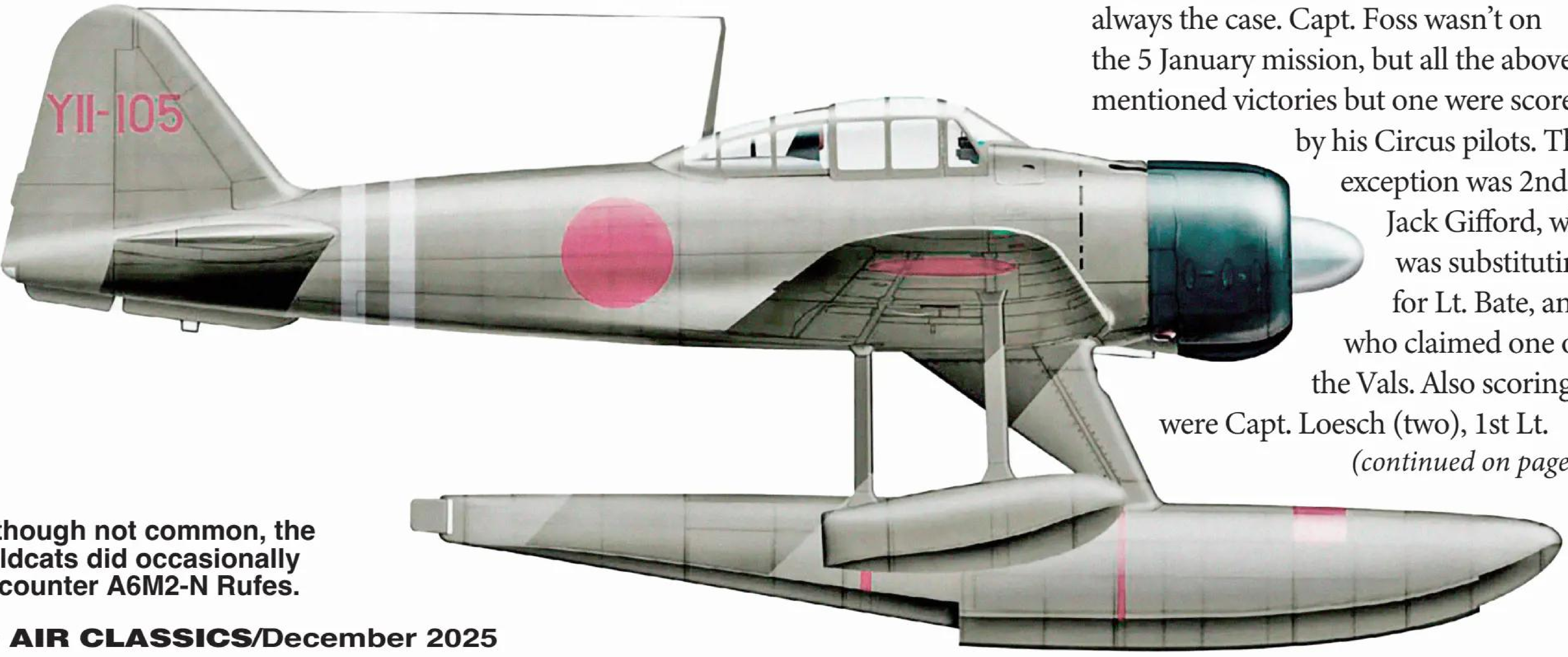
The following day, three Zeros attacked the VMF-121 formation during another Munda strafing mission and they were all shot down — one each by the squadron's 1st Lt. Sandy Hearn and Capt. Charles P. "Pat" Weiland and 1st Lt. Roy T. Spurlock of VMO-251.

The intense air actions continued as the new year 1943 began. On 2 January, a VMF-121 division was jumped by at least 15 Zeros while once again escorting some SBDs to Munda. Captain Irwin Carter was credited with destroying two of them, but Lts. Joe Crum and Pete Petersen were MIA, and both of them were later determined to have been killed. Captain Jack Foeller was wounded in his shoulder but made it back to The Canal in a badly shot up Wildcat. This brought an end to his combat tour.

Further tragedy struck the squadron two days later, on the evening of the 4th. While returning in the dark from a message drop to a USN task force in the Coral Sea, southwest of Guadalcanal, Hunter Reinburg's division ran into a thunderstorm and became lost, then separated. Reinburg and Effie Pierce barely made it back before their fuel ran out after spotting the searchlights at Henderson Field. Joe Moravec and Irwin Carter didn't make it back, however. MG Moravec bailed out into the sea and his face was badly bruised by hailstones during his parachute descent. He was rescued the following day by some natives from Santa Isabel Island, across The Slot east of The Canal — to which he was returned on 7 January — but Capt. Carter was not seen again.

On the morning of 5 January, VMF-121 flew cover for USN ships shelling Munda. At 0940 hours, some Vals attacked the warships, but the best they could do was a single near miss. The F4F pilots then dove on the Aichis, shooting down four outright and setting three more on fire. This was the first 1943 air action involving Joe Foss' two veteran divisions — his Flying Circus. Although they normally flew together, that wasn't always the case. Capt. Foss wasn't on the 5 January mission, but all the above-mentioned victories but one were scored by his Circus pilots. The exception was 2nd Lt. Jack Gifford, who was substituting for Lt. Bate, and who claimed one of the Vals. Also scoring were Capt. Loesch (two), 1st Lt.

(continued on page 64)



Although not common, the Wildcats did occasionally encounter A6M2-N Rufes.

THE INTERNATIONAL "CALENDAR OF THE YEAR"
GHOSTS IS PROUD TO ANNOUNCE TWO NEW CALENDARS FOR 2026
★ ★ ★ THE FORTY-SIXTH EDITION ★ ★ ★

GHOSTS-2026
World War Two Calendar

P-51D "MUSTANG"
"GLADIATOR" and "HIND"
B-17G "FLYING FORTRESS"
P-40M "KITTYHAWK"
"SEAFIRE" F XVII
PBY-5A "CATALINA"
P-47D "THUNDERBOLT"
N3N "CANARY"
FG-1D "CORSAIR"
RYAN STM-2
POLIKARPOV I-16 & I-153
B-25D "MITCHELL"

GHOSTS
2026
A TIME REMEMBERED
AVIATION IN
WORLD WAR TWO

AVAILABLE NOW – GHOSTS 2026
The Ultimate Aviation Calendars

Each Calendar Includes: 12 Magnificent Color Photographs by Philip Makanna
Silhouettes and Specifications Plus our Unique Chronological History of the
Aviation Events of the War – Suitable for Framing: 20" x 14"

GHOSTS
2026
THE GREAT WAR
AVIATION IN
WORLD WAR ONE

GHOSTS-2026
World War One Calendar

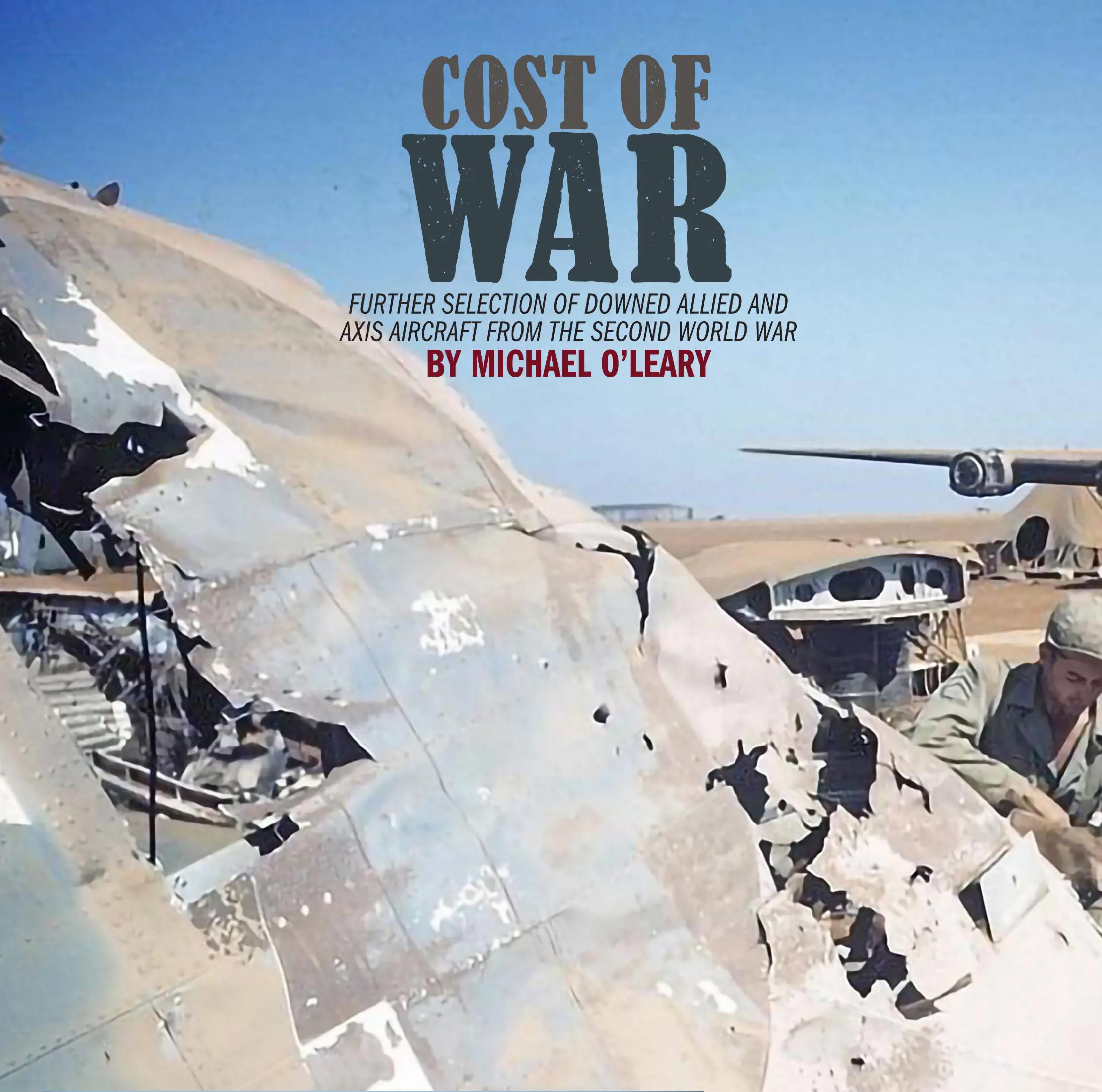
CURTISS JN-4H "JENNY"
SOPWITH PUP
RAF RE.8
FOKKER D.VIII
BRISTOL F.2B
ALBATROS D.Va
SOPWITH SNIPE
SOPWITH TRIPLANE
SOPWITH TABLOID
HANRIOT HD.1
PFALZ D.III
RAF FE.2b

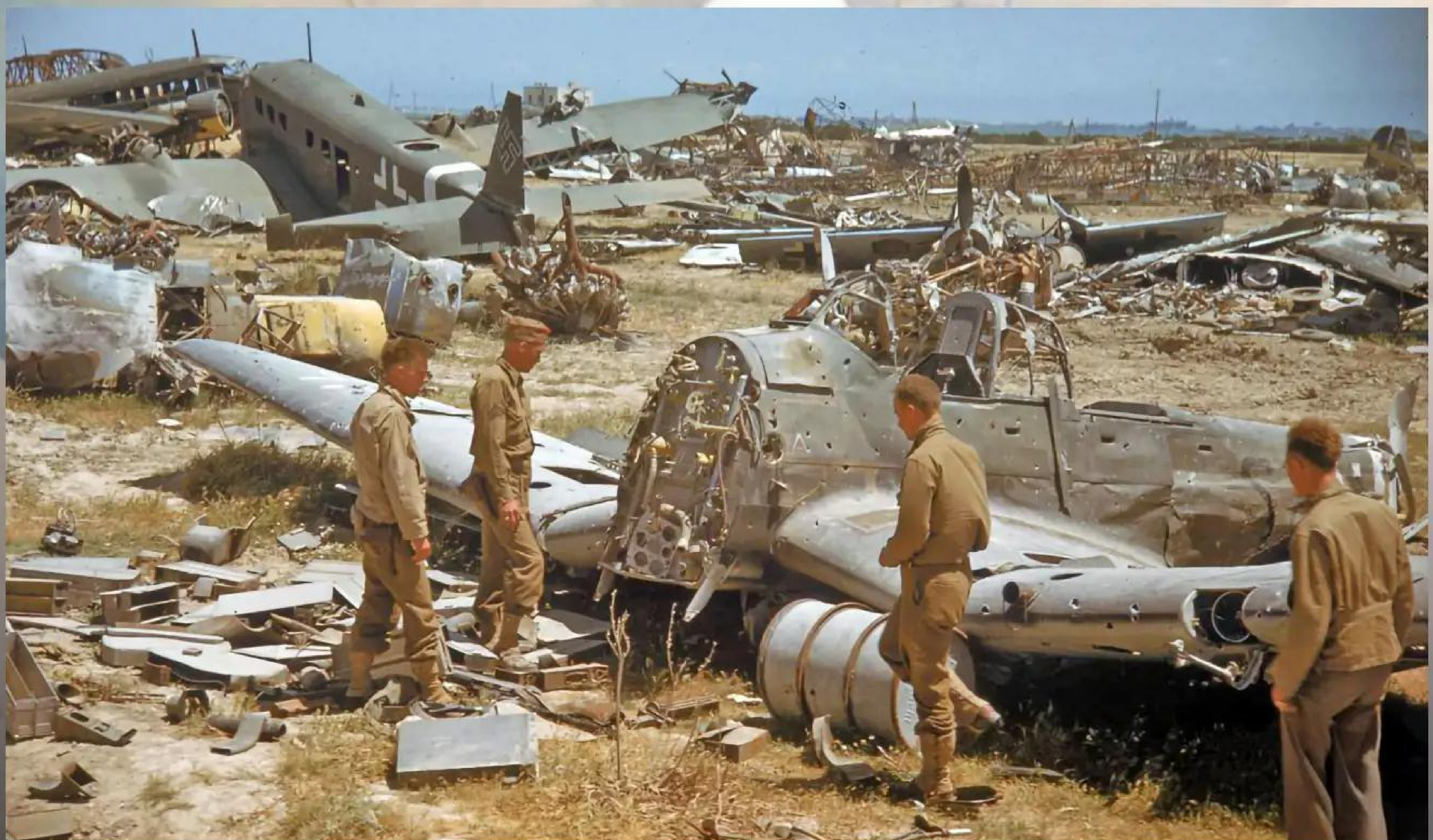
ORDER ON THE WEB! www.ghosts.com ORDER TOLL FREE @ 1-800-331-8231
$19.99 plus $10 Shipping (Add $5 Shipping per ADDITIONAL Item) CA Residents add 8.5% tax

COST OF WAR

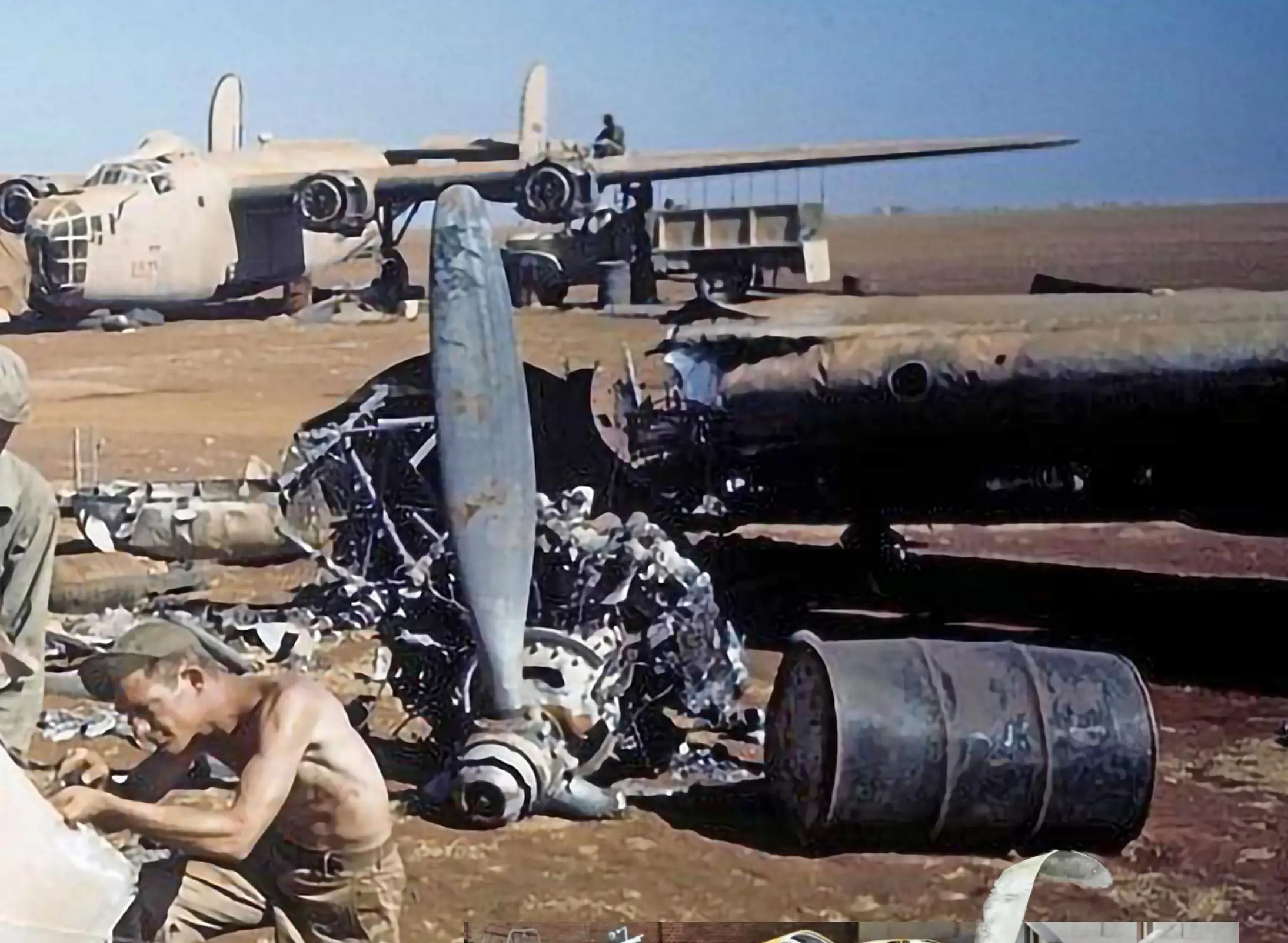
FURTHER SELECTION OF DOWNED ALLIED AND AXIS AIRCRAFT FROM THE SECOND WORLD WAR

BY MICHAEL O'LEARY

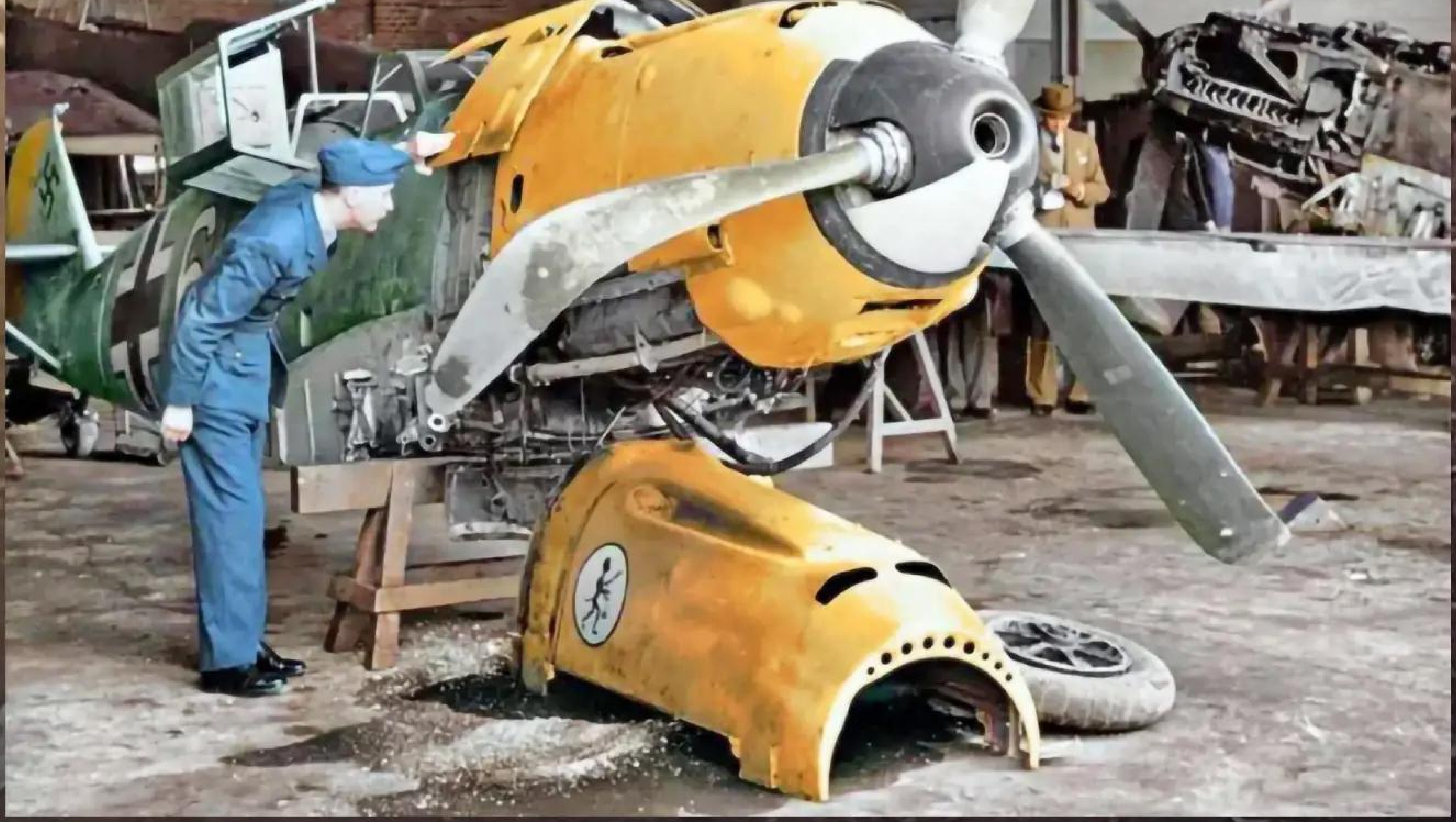




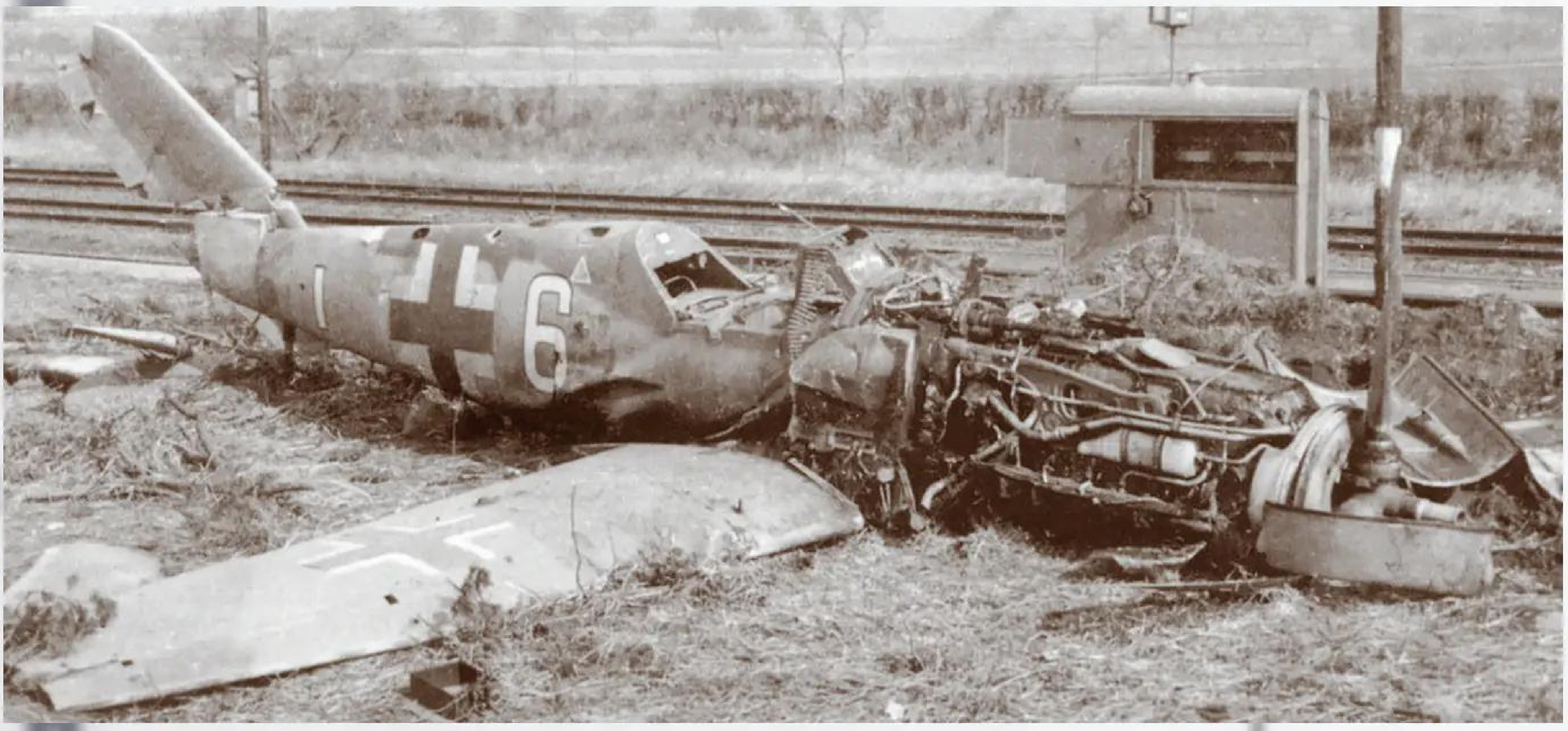
USAAF servicemen look over a graveyard of abandoned *Luftwaffe* aircraft at Berca Airfield after its capture by Allied forces. The striped Junkers Ju 87 *Stuka* in the foreground has drawn their attention.



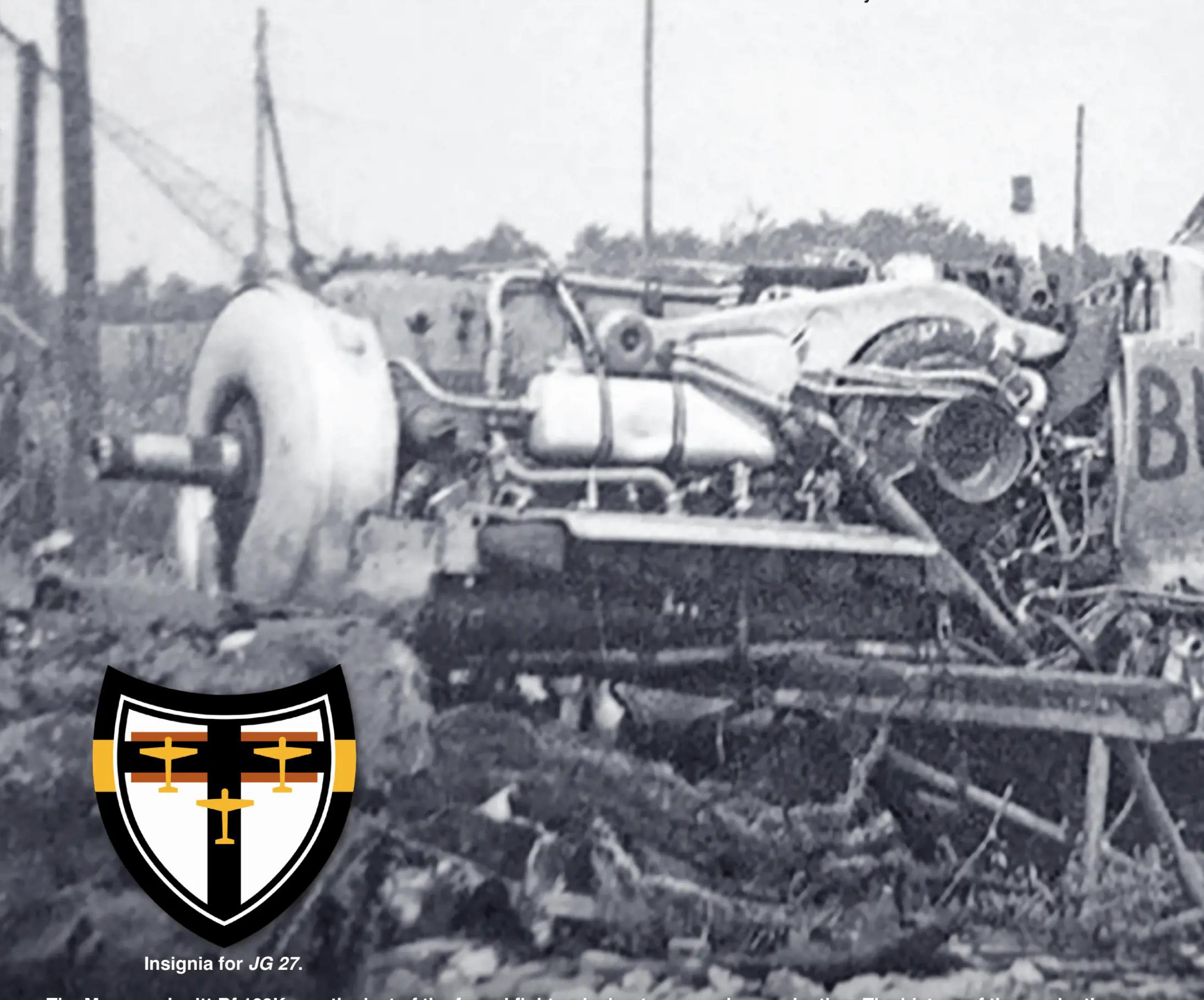
The scene is Berca Airfield in Benghazi, Libya and the date is 18 August 1943. Under a brilliant sun, USAAF mechanics from the 98th Bomb Group attempt to free needed parts from the wreckage of a Consolidated B-24 Liberator. At this point in the war, the parts supply chain was minimal and the wrecks, which were unfortunately quite numerous, had to be scavenged much like the desert vultures would devour a dead camel. The 98th had just completed the famous 1 August raid on Ploesti in Romania — Operation *Tidal Wave* — which was also the first anniversary of the unit's first combat mission when the unit bombed Mersa Metruh. On the Ploesti Raid, 48 B-24Ds of the 98th BG led by Col. John "Killer" Kane (who would be awarded the Medal of Honor) launched but only 40 entered the bomb run. Fifteen Liberators of were shot down over the target by the alerted and well-prepared anti-aircraft units and a further four were lost on the return leg. Eight B-24Ds landed at Allied fields while a dozen made it to Benghazi. The 98th would lose 141 airmen KIA, 35 as POWs with the Romanians, while four would evade capture and were returned by Yugoslav partisans. Another B-24D is being disassembled for parts in the background and the men have erected a tent by the right wing to serve as a work station and also to enable them to get out of the weather. It can be seen how the intense sun has quickly faded the national insignia on the immediate left. The official report on the raid revealed that little lasting damage had been done to the refineries.



During the Battle of Britain, select downed *Luftwaffe* aircraft were disassembled and removed to Farnborough for examination by the experts based at the field. One such aircraft was Messerschmitt Bf 109E-4B WNr 6316/W6+I flown by *Unteroffizier* Matthias Massmann. While flying at 25,000-ft, the German was surprised by a Spitfire and the DB engine was damaged in the ensuing fight, forcing the German to belly-land the plane in a farm field.

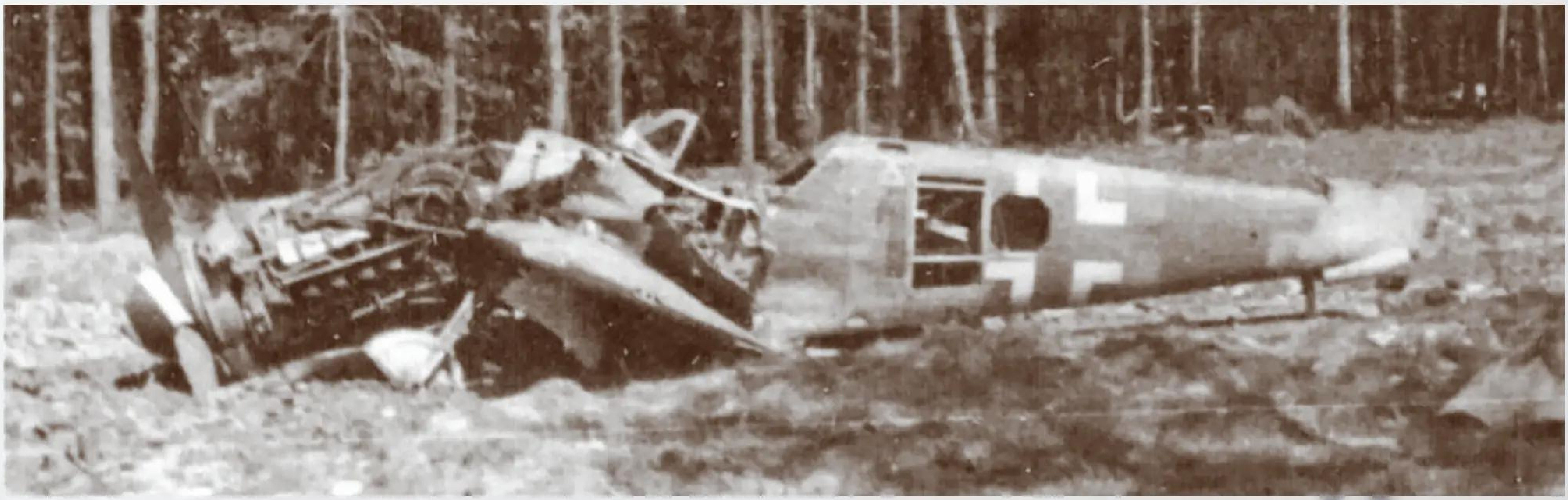


Bf 109K-4 *Yellow 6* of *9./JG 27* appears to have made a dead-stick landing near rail tracks during February 1945. Cowlings from the engine have been removed and tossed aside while a belt of MG 131 ammunition has been draped across the shattered windscreen. Deliveries of the K began in mid-October 1944 and the Messerschmitt factory at Regensburg had produced 534 fighters at the end of November with 856 completed by the end of the year. This was done during constant Allied air attacks and was a remarkable achievement. Regensburg delivered 1593 Ks by the end of March 1945. Records after that time were destroyed in the heat of combat.

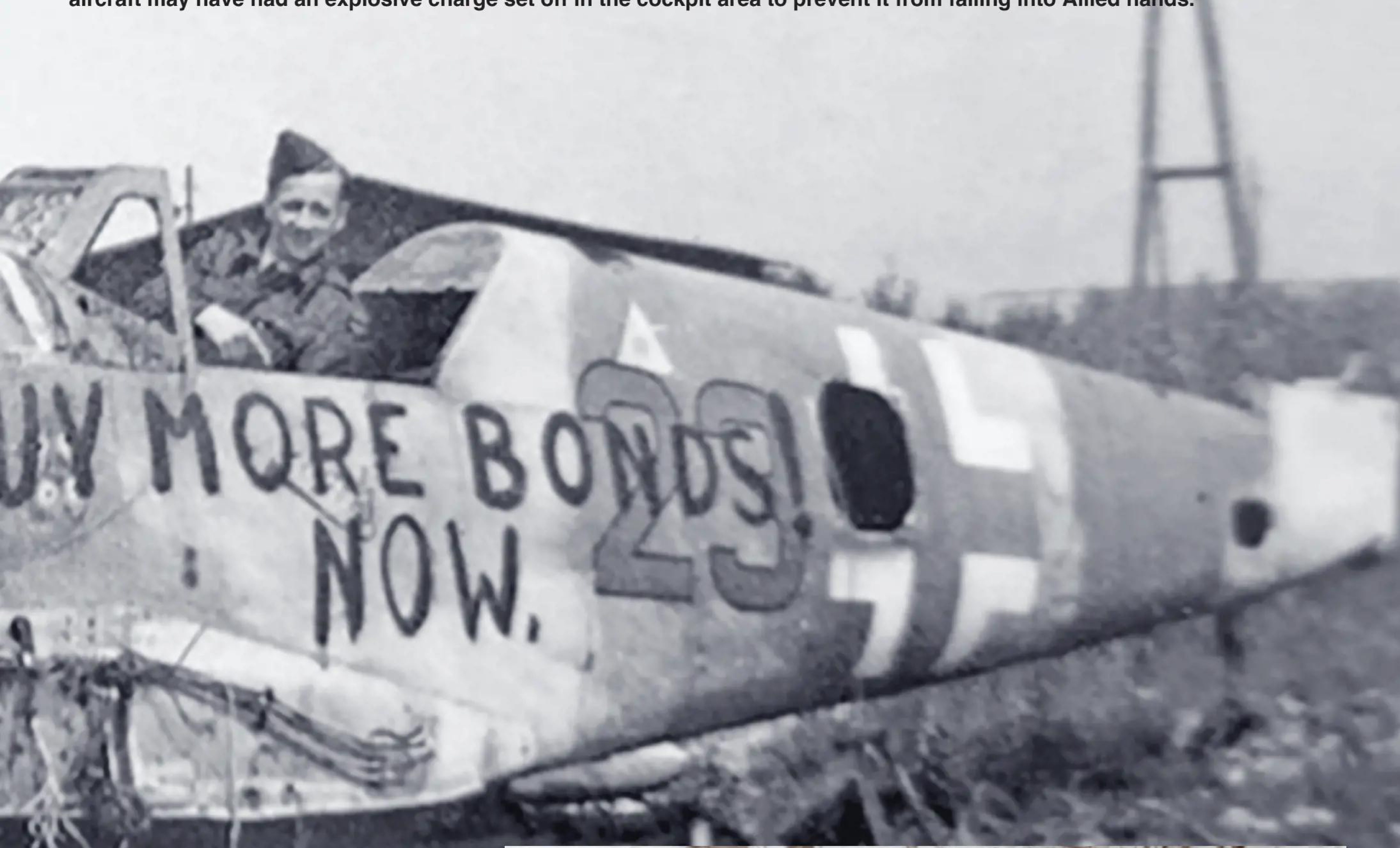


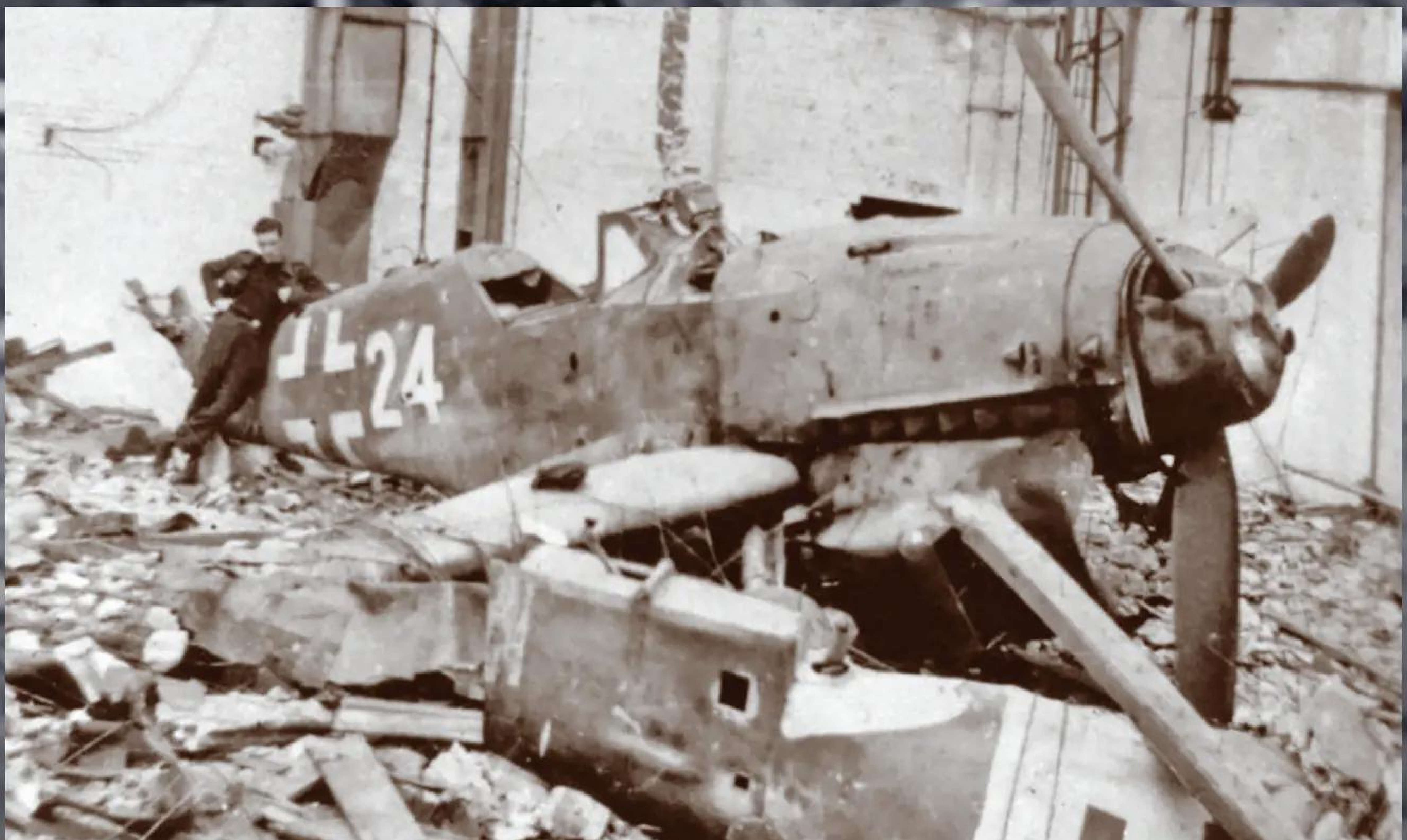
Insignia for *JG 27*.

The Messerschmitt Bf 109K was the last of the famed fighter design to see series production. The history of the production of the 109 series is rather remarkable since it started in 1937 and continued on right up to the collapse of Germany in May 1945. The K was an attempt to rectify all the previous confusing variants into a single aircraft. Even the Germans could not keep up with all the bewildering designations, field modifications, and other changes that made the 109 series an historian's nightmare. The plethora of series made maintenance — and indeed production — a costly and difficult business. As the Allies closed in on Germany, a standardized 109 with more interchangeable parts was needed. Series production of the Bf 109K began in August 1944 with the Bf 109K-4 (the only variant to be mass-produced) and it was armed with a single MK 108 cannon firing through the spinner (with 65 rounds) along with two 13mm (a bit over .50-caliber) MG 131s fitted in the upper cowling (300 rpg). Power came from the Daimler-Benz DB 605DB/DC inverted V-12 engine. Abandoned in Germany at the end of the war, this Bf 109K-4 carried the code *Red 23* when operating with *2./JG 27 — Jagdgeschwader 27*. The wings and tail have been removed but the engine appears to be quite fresh. An enterprising Britisher has used the fuselage to carry the slogan "BUY MORE BONDS NOW."

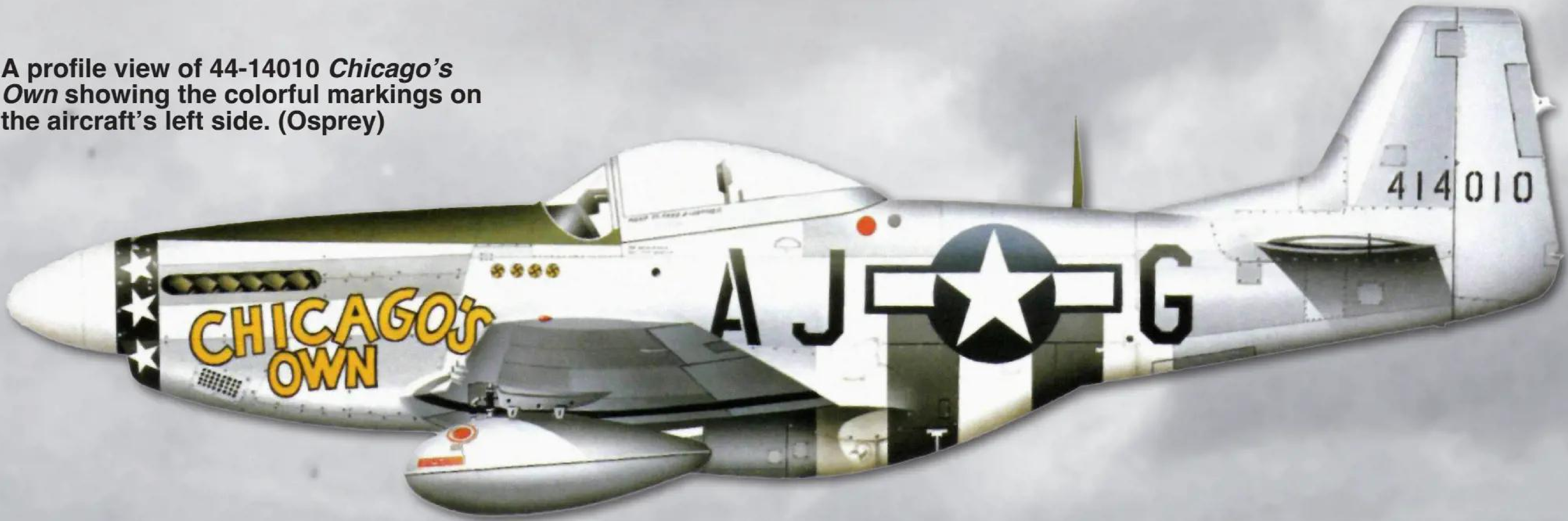


Remains of Bf 109K-4 *Red 1* from *2./JG27* in a wooded area of Germany following that country's surrender. It appears that the aircraft may have had an explosive charge set off in the cockpit area to prevent it from falling into Allied hands.

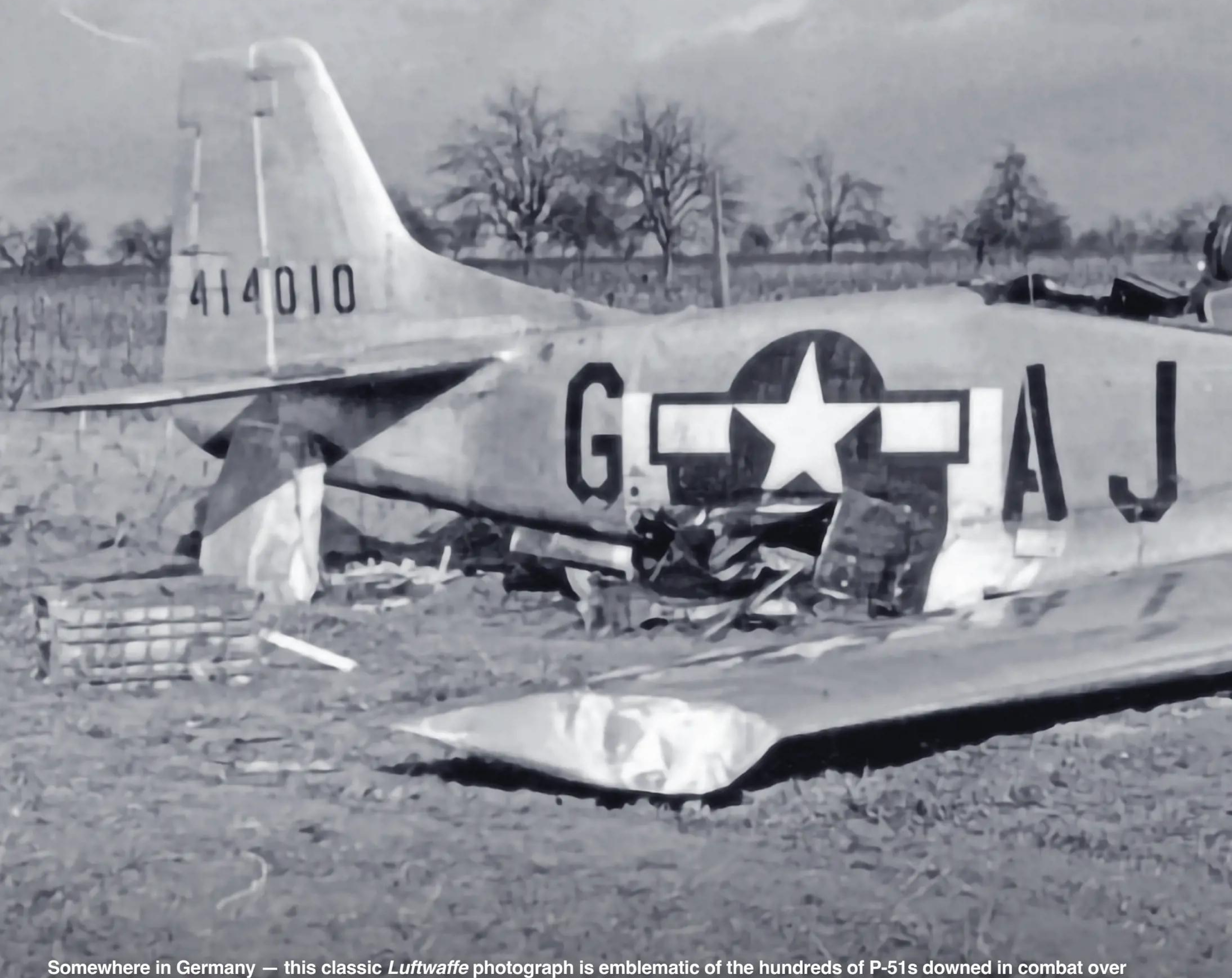




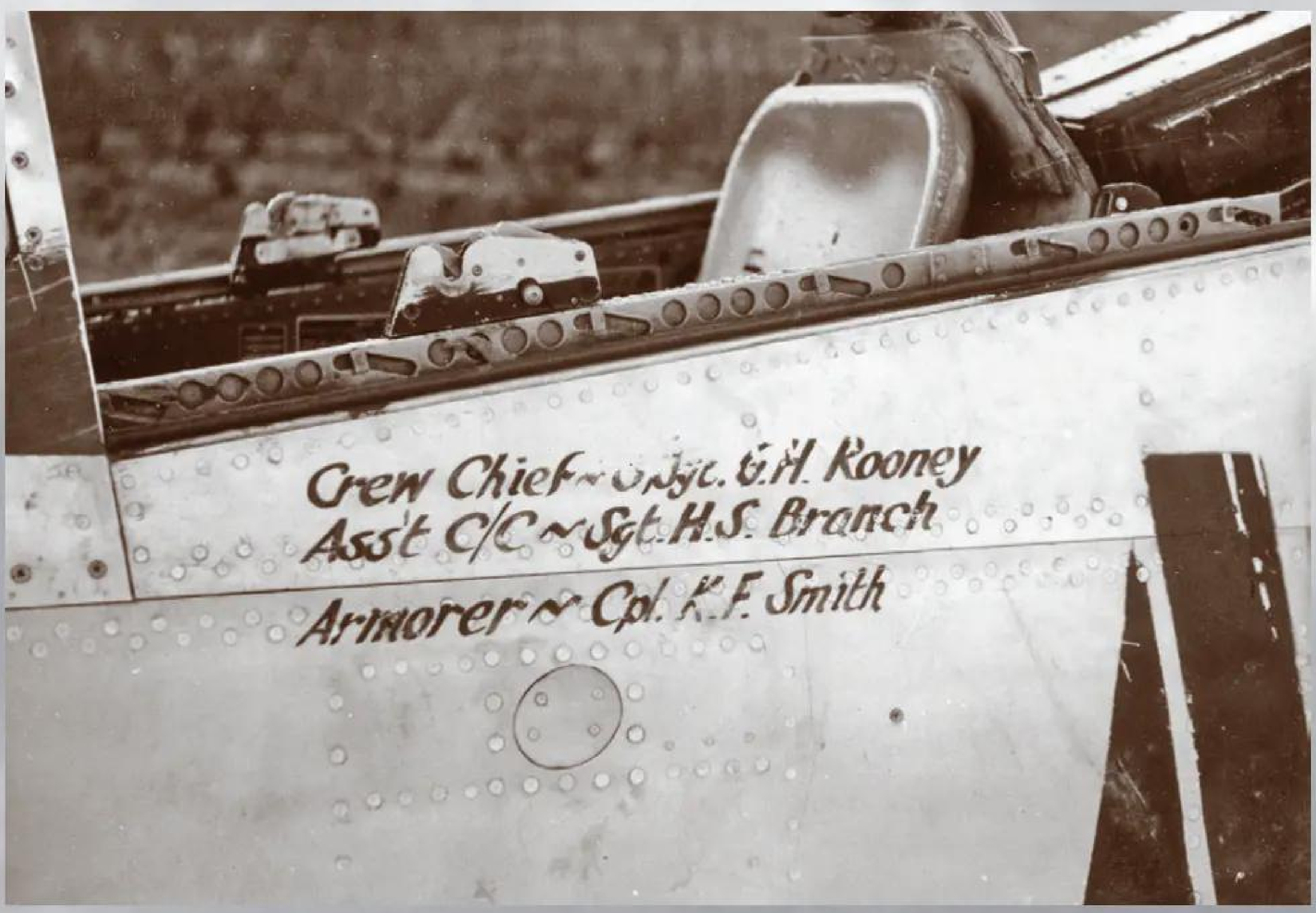
Bf 109K-4 *White 24* of *JG 27* was finished off by USAAF bombing. The tail cone of another 109K is in the foreground.



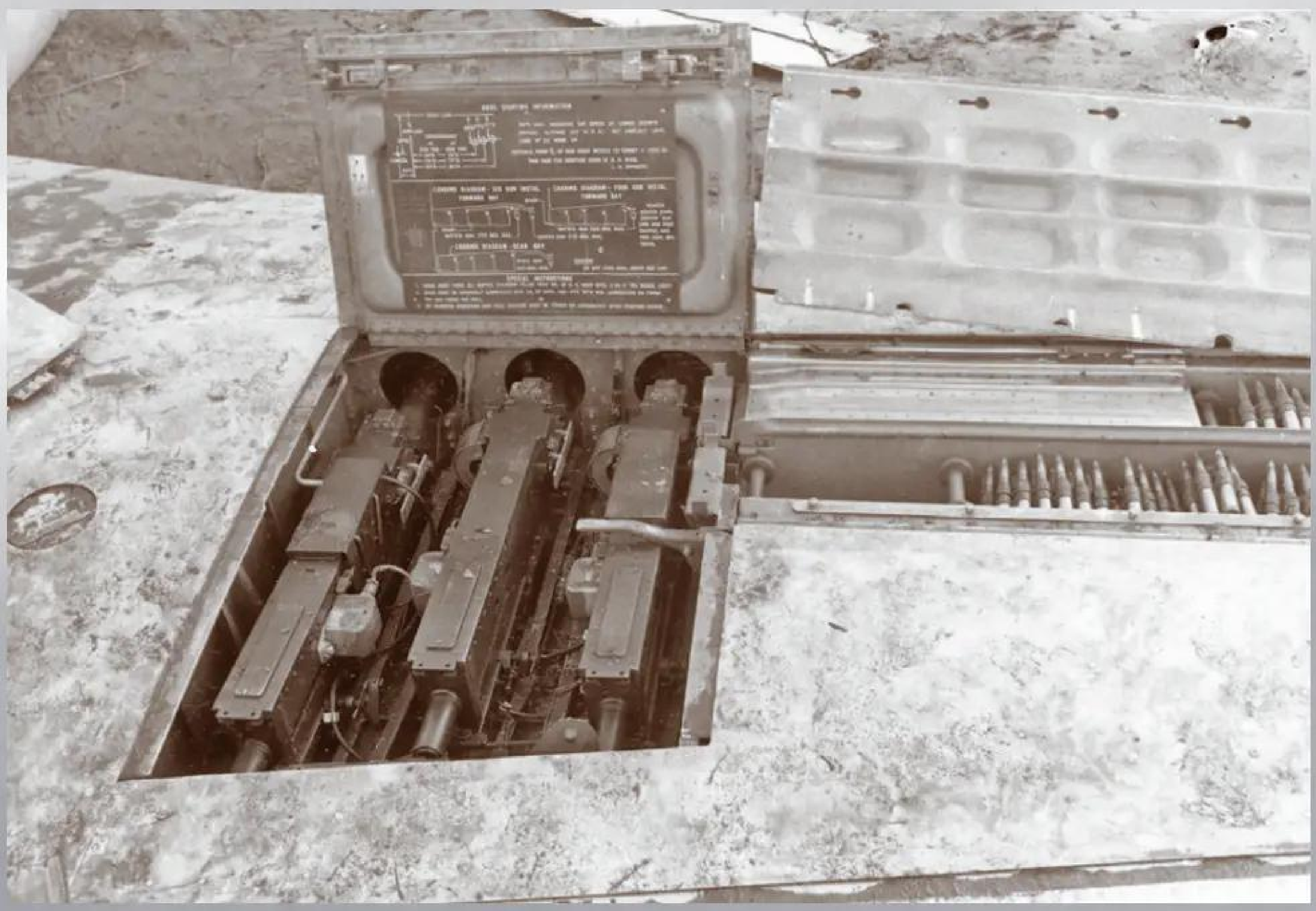
A profile view of 44-14010 *Chicago's Own* showing the colorful markings on the aircraft's left side. (Osprey)



Somewhere in Germany — this classic *Luftwaffe* photograph is emblematic of the hundreds of P-51s downed in combat over Europe. P-51D-5-NA 44-14010 AJ*G carried the name *Chicago's Own* and was the usual mount of 1st Lt. Fred Warner of the 356th Fighter Squadron, 354th Fighter Group (the "Pioneer Mustang Group"), but on 1 December 1944 it was being flown by Capt. Gordon T. McEachron and was on a dive-bombing/strafing mission over Germany when McEachron radioed "I've had it." Wingman Capt. Huge Pressnall saw coolant streaming from the Mustang and watched the pilot make a belly-landing in a cultivated field near Niederkirchen, Germany. McEachron stayed in the cockpit and raidoed for Pressnall to drop him a .45-cal pistol since he had not taken one on the mission. Pressnall made one slow pass and dropped the pistol and another pass to drop extra clips. However, McEachron radioed he could not find them but German civilians were approaching the Mustang and they seemed friendly. Pressman continued to make passes for ten minutes and then had to head home. German soldiers eventually arrived and the pilot was captured at imprisoned at *Stalag Luft I* Barth, Germany, where he remained until the end of the war.


Crew Chief ~ S/Sgt. G.H. Rooney
Ass't C/C ~ Sgt. H.S. Branch
Armorer ~ Cpl. K.F. Smith

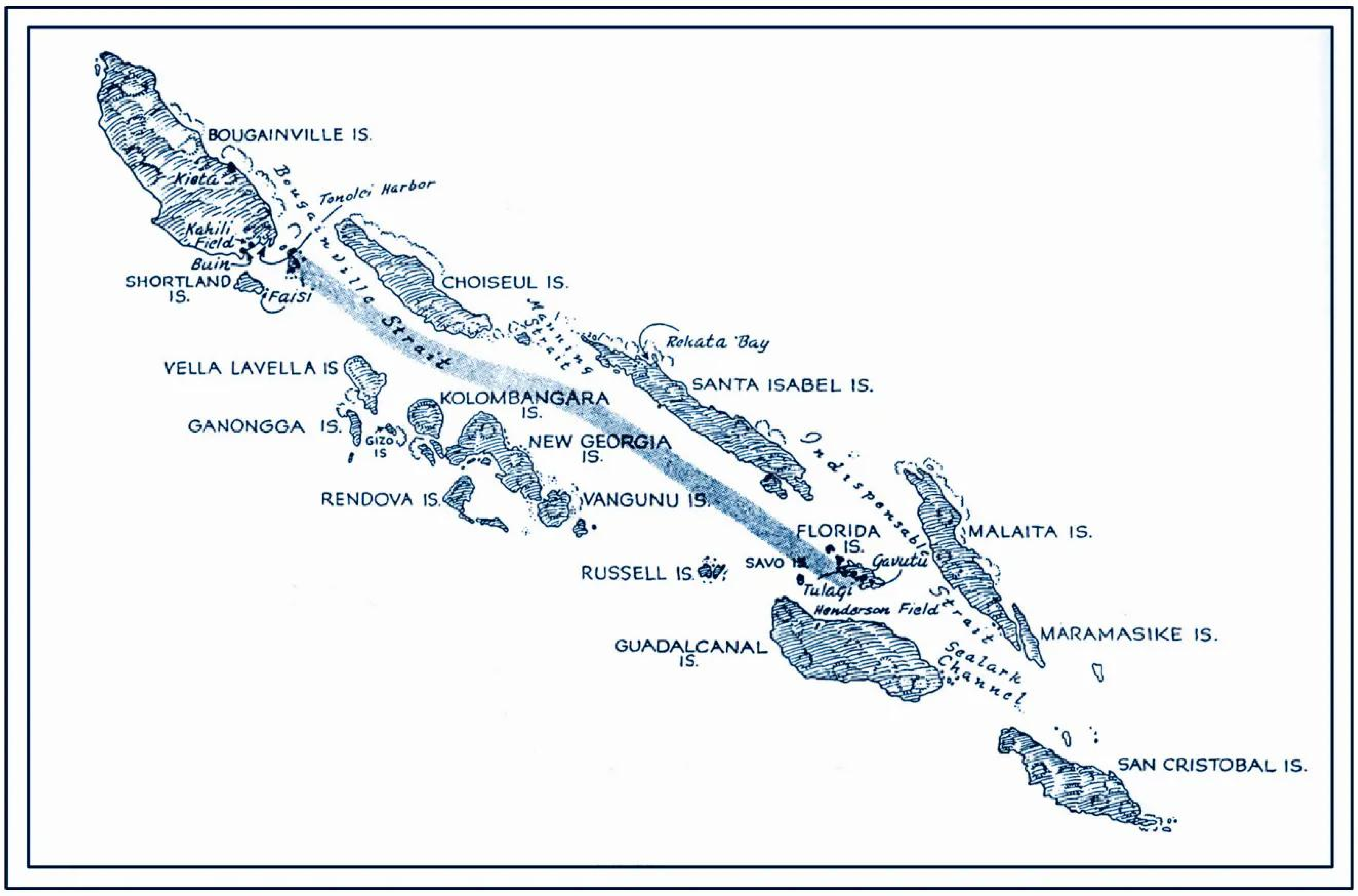
Luftwaffe photographers spent some time with *Chicago's Own*, taking detail photographs before the plane was probably removed and sent to a scrapping station. This photo records the names of the ground crew and also shows how the port for the flare gun had been riveted over.



The Germans opened the access panels to the armament and ammunition on the right wing to take this detail photograph that includes the placard for the bore-sighting information and ammunition loading for the three .50-caliber Browning M2 machine guns.

The photos and information on *Chicago's Own* were compiled by the Germans into *Luftgaukommando Report J-252*5 and this report, and hundreds of others, was captured by American forces on the final drive to Berlin. This photograph shows the left fuselage fillet and the flap setting. For some reason, the Germans colored the black and white photograph with red ink to highlight the "no step" marking on the Mustang. **AC**

(continued from page 56)


BOUGAINVILLE IS.
Kieta
Bougainville Strait
Tonolei Harbor
Kahili Field
Buin
SHORTLAND IS.
Faisi
CHOISEUL IS.
Manning Strait
Rekata Bay
SANTA ISABEL IS.
VELLA LAVELLA IS.
KOLOMBANGARA IS.
GANONGGA IS.
GIZO IS.
NEW GEORGIA IS.
RENDOVA IS.
VANGUNU IS.
Indispensable Strait
FLORIDA IS.
MALAITA IS.
RUSSELL IS.
SAVO
Gavutu
Tulagi
Henderson Field
GUADALCANAL IS.
MARAMASIKE IS.
Sealark Channel
SAN CRISTOBAL IS.

Map illustrating "The Slot" between Bougainville and Guadalcanal.

On 24 October 1942, Vice Admiral Kusaka Jinichi commanded the 11th Air Fleet to launch 18 Betty bombers and 28 Zeros to attack Henderson. In response, VMF-121 and other units scrambled 24 Wildcats and four P-400 Airacobras to meet the enemy.

Six-victory VMF-121 ace Maj. Francis F. "Effie" Pierce, who scored five kills on the squadron's second tour and another on its third, flying Corsairs, was still with it on Peleliu Island in late 1944. He is seen with FG-1A BuNo 14056 *Mary*.

Marontate (who was flying F4F-4 BuAer number 03530), likewise two, and 1st Lts. Freeman and Presley with one apiece.

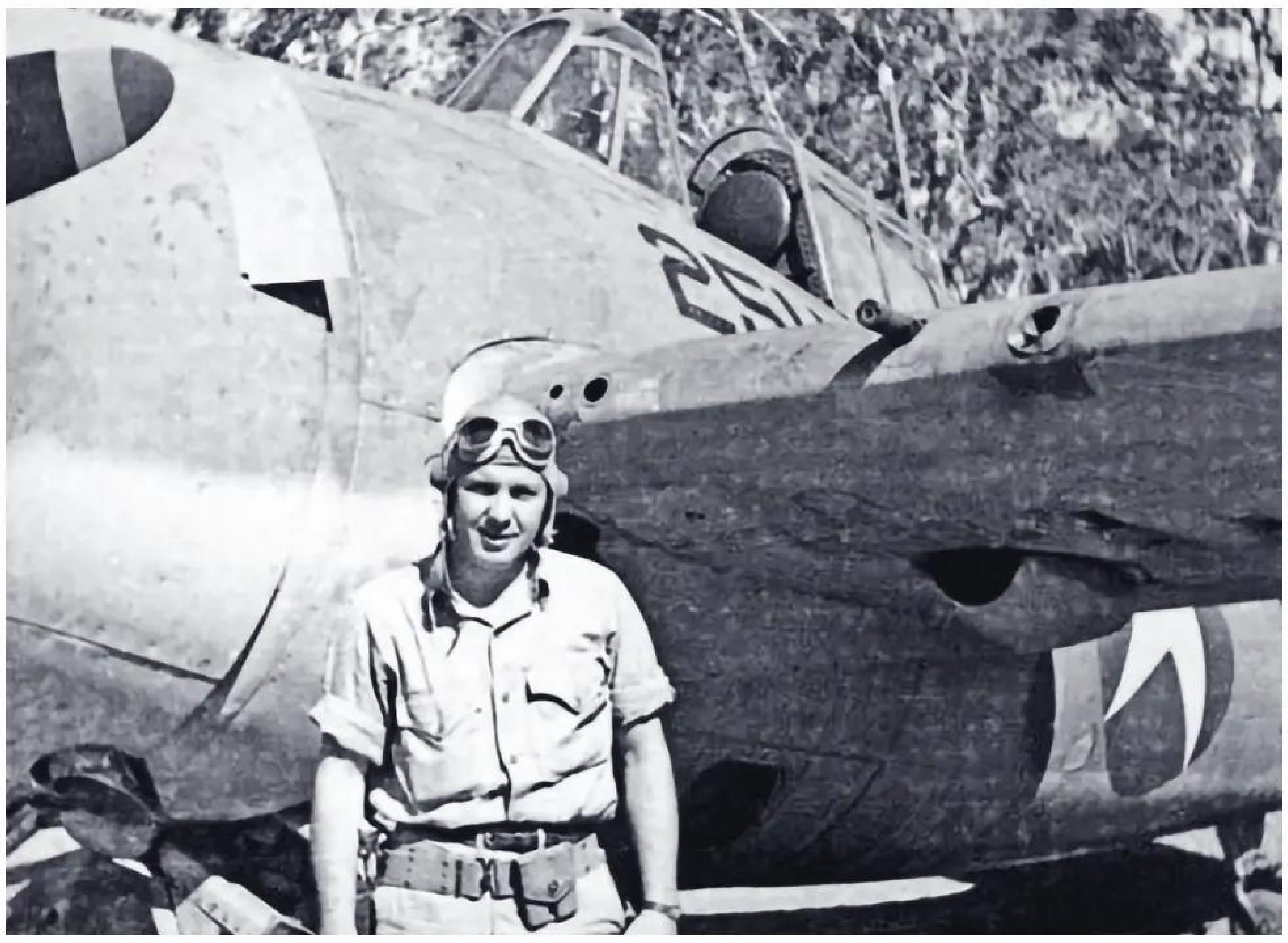
On the way home these Wildcat pilots were jumped by some Zeros. They were nearly out of ammo but bluffed the enemy by having two of the wingmen turn toward them whenever they began a firing pass. The Zeros finally turned back as they approached Guadalcanal. One of them was seen to catch fire and fall into the sea off the island's Cape Esperance, on its northern tip, although it wasn't known who or what was responsible.

Early that month, Maj. Yost had come down with a bad case of malaria, which was a constant threat to all of VMF-121's personnel in that oppressive tropical clime. On the 9th, most of VMO-251 came to *Cactus* to stay, although the whole squadron wouldn't officially be based there until the 17th. In the meantime, its pilots continued to fly with VMF-121, and while Yost was in hospital, VMO-251's CO, Maj. Joseph N. Renner, as the ranking pilot, would also be its host squadron's *de facto* commanding officer.

The squadron's 11 January mission turned out to be its most eventful thus far. Herb Long remembered it well years later:

"On 11 January 1943, we were escorting a flight of twelve SBDs up 'The Slot' to intercept and destroy ten Japanese destroyers. While still several miles short of our target, we were jumped by 14 Zeros [at least some of them from the 204th Kokutai]. *Of the dozen escorting F4F-4 Wildcats, four were led by Maj. William R. 'Soupy' Campbell [of VMO-251] and assigned as top cover, about 2000 feet above the bomber formation. Captain Hunter Reinburg with his four flew intermediate cover, and I led the low cover at bomber altitude.*

"As the 14 Zeros were sighted, a rear gunner in one of the SBDs tallyhoed the sighting on our common frequency but then, strangely enough, continued to transmit in a highly excited manner, thus tying up all the radios in the formation and preventing the fighters from using them. As the Zeros worked their way above and to our rear for the best attack position, Hunter's four Wildcats turned into them in order to defend the bombers from their attack. Just about then the frantic radio transmissions ceased and we were again able to use the radio. The first message I heard was from Soupy Campbell, ordering Hunter to 'get back and stay with the bombers.' This Hunter did, but as his four planes were deployed with considerable separation between sections, his second section was caught on the outside of the turn and was left behind, apparently easy targets for the diving Zeros. That was when I made the decision to leave the bombers and attempt to assist, so I turned my four aircraft in the direction



Major William R. "Soupy" Campbell, the XO of VMO-251, often flew with VMF-121 and scored his only two aerial victories with it during November 1942.

Three VMO-251 pilots. On the right is 1st Lt. Roy Spurlock, who scored two Zeros while flying with VMF-121 on 27 December 1942.

of the trailing two fighters [flown by Lt. Joe Cannon and Gunner Ed Zielinski]. This move left six Wildcats with the twelve bombers and our six Wildcats were left behind to fight the 14 Zeros.

"The six fighters were immediately in deep trouble, as Joe Cannon was hit almost before we fired our first shots, apparently in his [42-gallon] belly tank, as it was flaming. We called to him to release his tank but evidently he could not. We all hated to be assigned aircraft with belly tanks, as they were so difficult to release. This was Joe Cannon's reaction when the alert jeep dropped him off at his assigned plane before the mission, and he expressed his disappointment in clear and explicit terms. The other eleven aircraft were all equipped with [58-gal.] auxiliary fuel tanks that were attached to the wing. As a result of this first attack by the Zeros, Joe Cannon crashed into the sea. Later rescue efforts proved fruitless.

"While the Zeros seemed content to stay and work us over, the bombers proceeded on course. The tactics employed by the Japanese were simple — dive, fire, then zoom back up to altitude. Their performance was much superior to ours and the only advantages we had were superior firepower and an airframe that was built like a locomotive. And it wasn't long before they hit another — this time 'Ski' Zielinski. Ski [in F4F-4 BuNo 12131] was hit somewhere in the radio compartment, and with his cockpit filling with smoke he dove for the nearest cloud and, being an old radio repairman, pulled wires until the smoke cleared. He then rejoined the fight.

"While Ski was having his troubles, we in the remaining four fighters were forced into a tight Lufbery Circle, trying to protect each other's tails while the Zeros were having a field day diving, firing, then zooming back to altitude for another try. At that point I believed that it was just a matter of time before we were all shot down, but then Ski, returning to the dogfight and seeing that we were in difficulty, joined our desperate, last-chance circle, but in the opposite direction. This resulted in at least one firing plane against the diving Zeros. This the four remaining Zeros did not like, so they disengaged and returned to their base at Munda.

"Thanks to Ed Zielinski we were able to return to Guadalcanal. My plane was pretty well shot, with more than 120 holes, plus 27 spent slugs in the left tire, and all three were flat."

Marine Gunner Ed Zielinski.

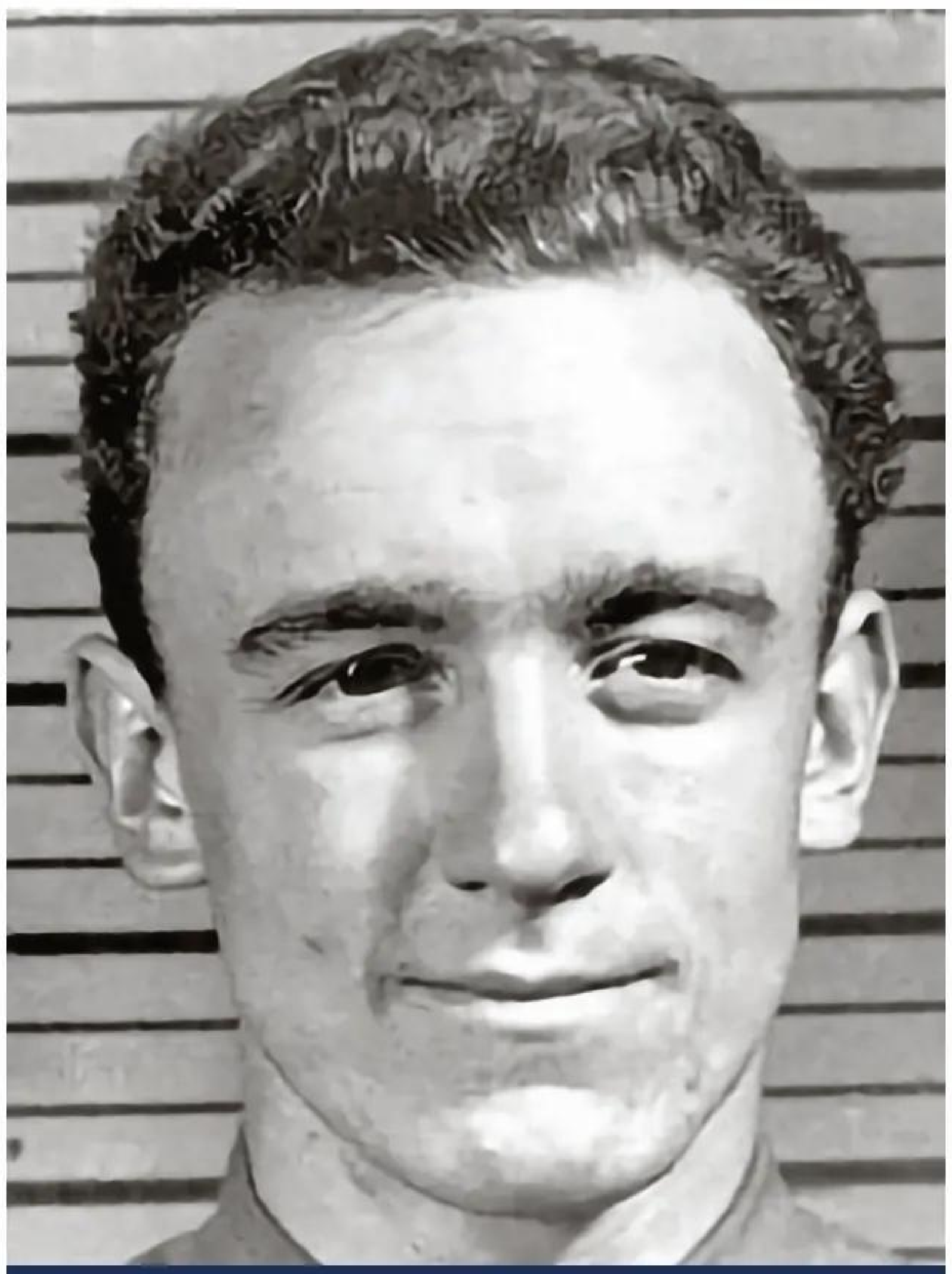
VMO-251 Wildcats undergoing repair and maintenance.

Ground crew of VMF-121 pose with one of their Wildcats. It appears that the F4F mainly flew with just the right drop tank in place.

This was certainly Zielinski's most exciting mission. He downed two Zeros as they attempted to inject themselves into the Wildcat Lufbery. He had his sight on a third and had squeezed off a very short burst when he was hit again. His F4F received many strikes, but he was protected from injury by the armor plate behind his seat. As his cockpit filled with smoke, he dove into a cloud and successfully eluded his attacker. He had opened his canopy and was considering a bailout when the smoke began to thin somewhat. He discovered that it was coming from an electrical fire and quickly disconnected the plane's electrical system. This meant his guns would not fire, but the Wildcat was still flying so he headed for home, utilizing any available cloud cover.

Soon Zielinski had the feeling that he was not alone. Looking to his right, he saw a Zero flying on his wing, the red "meatball" (*Hinomaru*/rising sun) insignia on its fuselage looking huge and its pilot staring right at him! The enemy pilot made no move to attack the ailing Wildcat, which was a sitting duck. Zielinski became so unnerved that he considered ramming the enemy plane to "get it over with."

Lieutenant Herb "Trigger" Long was a double ace who scored three kills during VMF-121's second tour, three more while flying Corsairs with VMF-122 in the Solomons, and an additional four with VMF-451 Corsairs off the carrier USS *Bunker Hill* over Japan in 1945.



First Lieutenant Bill Marontate was credited with ten victories during VMF-121's first combat tour and three more on its second, before being killed in action on 15 January 1943 when, according to Joe Foss, he collided with a Zero.

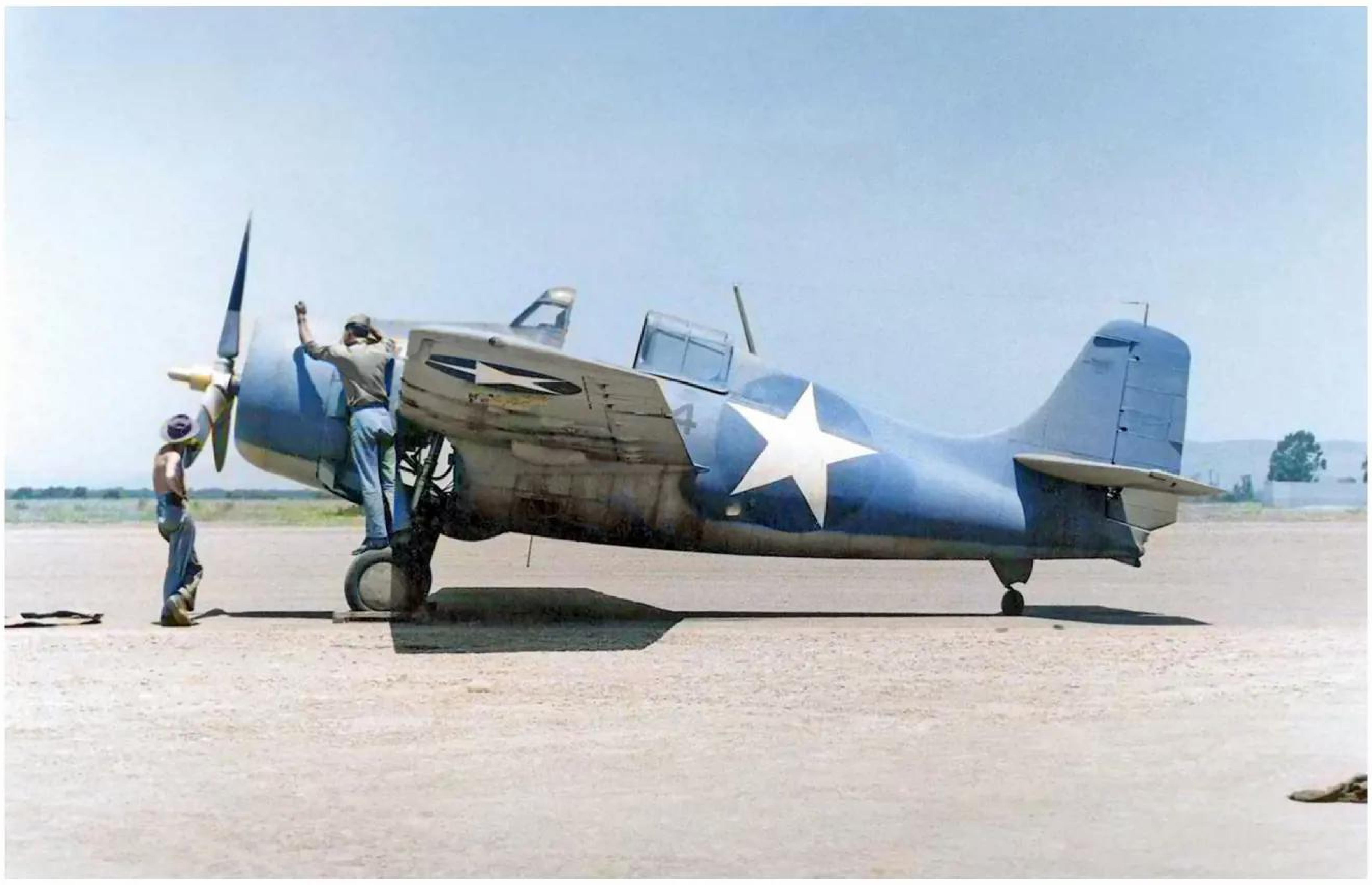
Suddenly the Zero dived under the F4F, pulling up in front of it in a loop, continuing over the top and ending up on the marine gunner's tail. Ski saw it in his rearview mirror briefly, then it disappeared below him again. The Zero pulled up in front of his Wildcat once more and Zielinski reflexively hit the firing button for his six useless .50-caliber machine guns. His opponent then proceeded to do a roll, peeling off from it to the right in the direction of Munda, and he returned safely to *Cactus*.

Shorty Mueller also recalled this mission:

"We were hit from above — always from above! Using strict flight discipline and employing the Thach Weave we were able to shoot the Zeros off each other's tails quite handily. Fortunately, our aircraft could absorb a great deal of punishment even though the Zeros could outmaneuver us quite readily. On this mission I shot down three of the enemy, two of which were burners. We didn't get too many flamers, so these stand out in my memory."

First Lieutenant Mueller was actually credited with two confirmed kills and a damaged. Captain McMahon (flying F4F-4 BuNo 11172) also scored two victories, as did Capt. Pierce (plus one probably destroyed), while 1st Lt. Long (in F4F-4 BuNo 03465) got one. Although they all made it back except Lt. Cannon, five of their Wildcats were badly shot up. Trigger Long had a shrapnel wound on the right side of his face and Mueller was hit in the legs. A couple of 20mm shells had exploded in the latter's cockpit, one of which took out half his instrument panel and his radio. "Just another testimonial to the manner in which Grumman builds airplanes. A lot of us wouldn't be here if it weren't for that outfit."

On the early morning of 15 January, three divisions totaling eleven F4Fs, led by Capt. Reinburg, with Lt. Long and 1st Lt. Glen A. Loban of VMO-251 as the other division leaders — along with some P-39s of the 12th FS — escorted the SBDs to attack nine enemy destroyers in



VMF-121 F4F-4 being prepared for a mission. Note the large size of the fuselage national insignia.

The Slot 140 miles north of Guadalcanal. Two dozen enemy fighters, identified as "Zeros," intercepted the formation shortly after 0730 near New Georgia. In fact, the supposed Zeros were some of the 60 Japanese Army Air Force (JAAF) Nakajima Ki-43-II *Hayabusas* (which the Allies called "Oscars" and which looked very similar to Zeros) of the JAAF's 11th *Sentai* (Group) that were then based at Rabaul on New Britain Island northwest of the Solomons.

First Lieutenant Bill Lundin had not been scheduled to fly that day, but he was awakened before dawn and told that he would be replacing MG Zielinski in Herb Long's division. Ski had contracted malaria and was too ill to fly. Just before takeoff Lundin met his wingman, Capt. Jack R. Moore of VMO-251, for the first time.

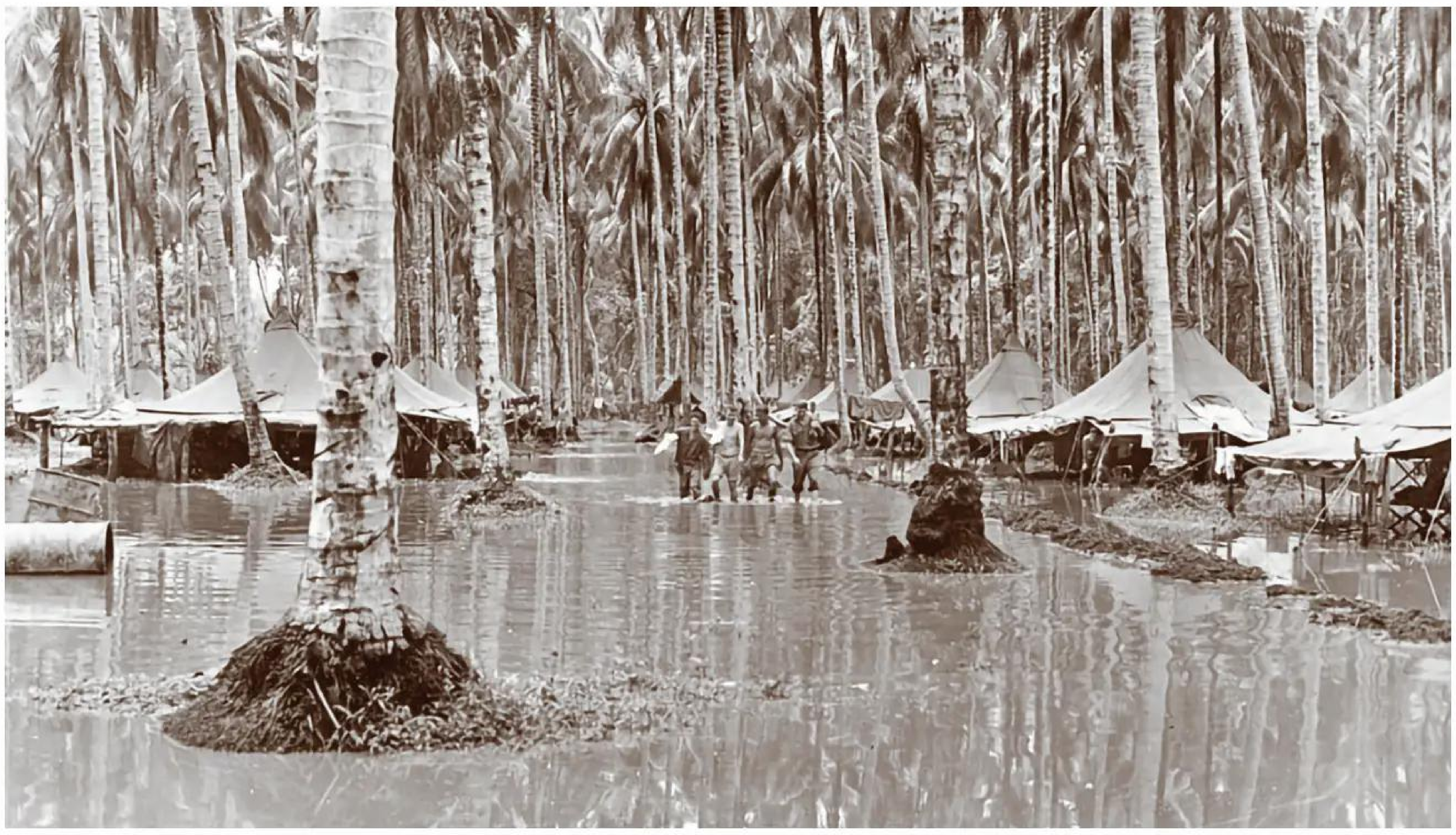
Long's division was assigned the difficult task of close cover for the Dauntlesses, other F4Fs and the Airacobras providing their intermediate and high cover. It went down with the dive-bombers from 8000 feet, strafing the destroyers to suppress their AA fire. A dogfight had commenced between the higher Wildcats and the Oscars, and after its strafing run the lower division pulled up to join it.

While slowly gaining altitude, Lundin suddenly had a Zero in his sight. It pulled up into a roll and he went into an Immelmann, catching the enemy plane at the top of it and bracketing the Oscar with his machine guns. It then did a Split-S and went straight down; another F4F pilot saw it crash. There were other enemy fighters nearby and Capt. Moore shot one of them off Lundin's tail, as did Capt. Pierce. Lundin and Moore were then suckered into attacking another Oscar well below them. As they dived on it they were hit from above by some of its buddies and began scissoring (the famous Thach Weave) for protection. Lt. Lundin smoked an Oscar that was on Capt. Moore's tail, and then both of their planes were hit as they passed each other in the weave. (The above account well illustrates the mutual protection tactics employed by the squadron's pilots.)

According to Lundin, a Zero "put four bullets in my cockpit, shattering the instrument panel, rudder bar, prop control and compass and wounding me in the ankle, put one bullet in the oil tank and several in the tail, while another Zero placed six or seven in one wing. My wingman scared the Zero off my rear [but] I was in real trouble. All my electrical system was shot up, my compass was gone, my guns wouldn't work, nor would my radio."

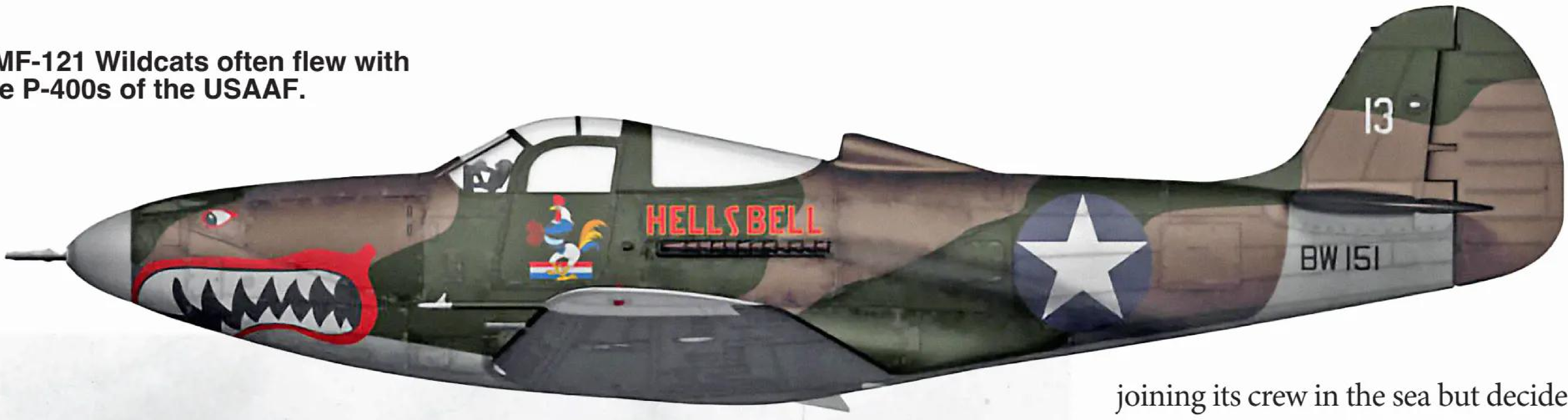
Thereby separating from Capt. Moore, Lundin made a quick turn to the right. This was a mistake, as it took him directly over the enemy destroyers. To build up speed and to escape from the ships' AA fire he put his F4F into a dive. Fortunately, the Oscars had not continued

This still was taken from a 16mm film and shows a VMF-121 Wildcat pilot getting ready for a perfect three-point touchdown.



Conditions on Henderson were miserable and a heavy rain had flooded the VMF-121 living area. With the damp climate and standing water, malaria was common.

VMF-121 Wildcats often flew with the P-400s of the USAAF.



Enemy night raid scored a direct hit on this USAAF Liberator.

to press their initial attacks. Since both of the Wildcats were smoking and at low altitude, the enemy pilots no doubt considered them goners — correctly as it turned out. Possibly they were low on fuel and/or out of ammo.

However, as Lt. Lundin cleared the enemy destroyers another, lone, Oscar latched onto to his tail. He could see its machine guns twinkling in his rearview mirror and skidded to the right, avoiding the bullets. The Ki-43 then passed under his F4F and pulled up in front of it. Although presented with a perfect shot, Lundin's guns would not fire! Greatly frustrated, he began recharging them as the enemy fighter came around for another, slower pass. He then began throwing his plane around the sky violently to spoil its aim. Its pilot overflew the Wildcat again, passing above it this time, as it was very low over the water by now. Lundin was again presented with a beautiful shot and again his guns would not fire! At this point the Oscar pilot rolled onto the F4F's right wing, rocked his wings, waved, and peeled off, disappearing in the direction of Munda. Only one of its two nose-mounted machine guns had been firing on the second pass and it was obviously now out of ammunition. Its pilot had only scored a single hit on Lundin's Wildcat.

Lundin then joined up with two SBDs. One of them, badly shot up, soon made a water landing. He briefly considered joining its crew in the sea but decided instead to try to make Guadalcanal in his shot-up, smoking F4F. From the north coast of New Georgia Lundin flew southeast to the Russell Islands, then toward Savo Island, a few miles northeast of Cape Esperance. His engine finally gave out and he had to ditch the plane between Savo and *Cactus*. He was in the water for 28 hours, during which time he was attacked by sharks, nearly drowned, and was strafed by a Japanese plane. He was finally rescued by an Allied corvette, a converted schooner, and taken to Florida Island, next to Savo. Lundin was returned to Guadalcanal on the 17th.

His wingman Jack Moore had a similar experience. Moore remembered later that the enemy fighters "had the altitude. I gave one a good going over as it came down, and I felt gunfire hit my own plane. I looked around and saw a Zero [sic] practically in the cockpit with me. I skidded to the right and gave him a burst. He began to smoke [although Moore received no credit for it], and I tried to make home plate." His oil line had been cut, however, and he too had to make a water landing, between New Georgia and Santa Isabel Islands. His only wound was a bit lip. He spent four days on the water in his raft before making it to shore on Santa Isabel and was back on Guadalcanal by the end of the month.

(Postscript: While Bill Lundin and Jack Moore were coincidentally serving together again in the Korean War eight years later, Moore recalled to Lundin that he had witnessed his second opponent that day hit the water, which Bill hadn't realized — and with which kill he was never credited. After a subsequent second tour flying Chance-Vought F4U Corsairs with VMF-122 in the Solomons, Lundin had been credited with 4.5 e/a destroyed in the air. If his other, unknown, victory had been claimed and confirmed, he would have been an ace.)

Captain McMahon downed one of the enemy fighters in a head-on attack

Due to the rough nature of Henderson Field, operational accidents were frequent. This Wildcat had gone off the runway. Note that its tailhook is extended.

Wildcats on the ready at Henderson.

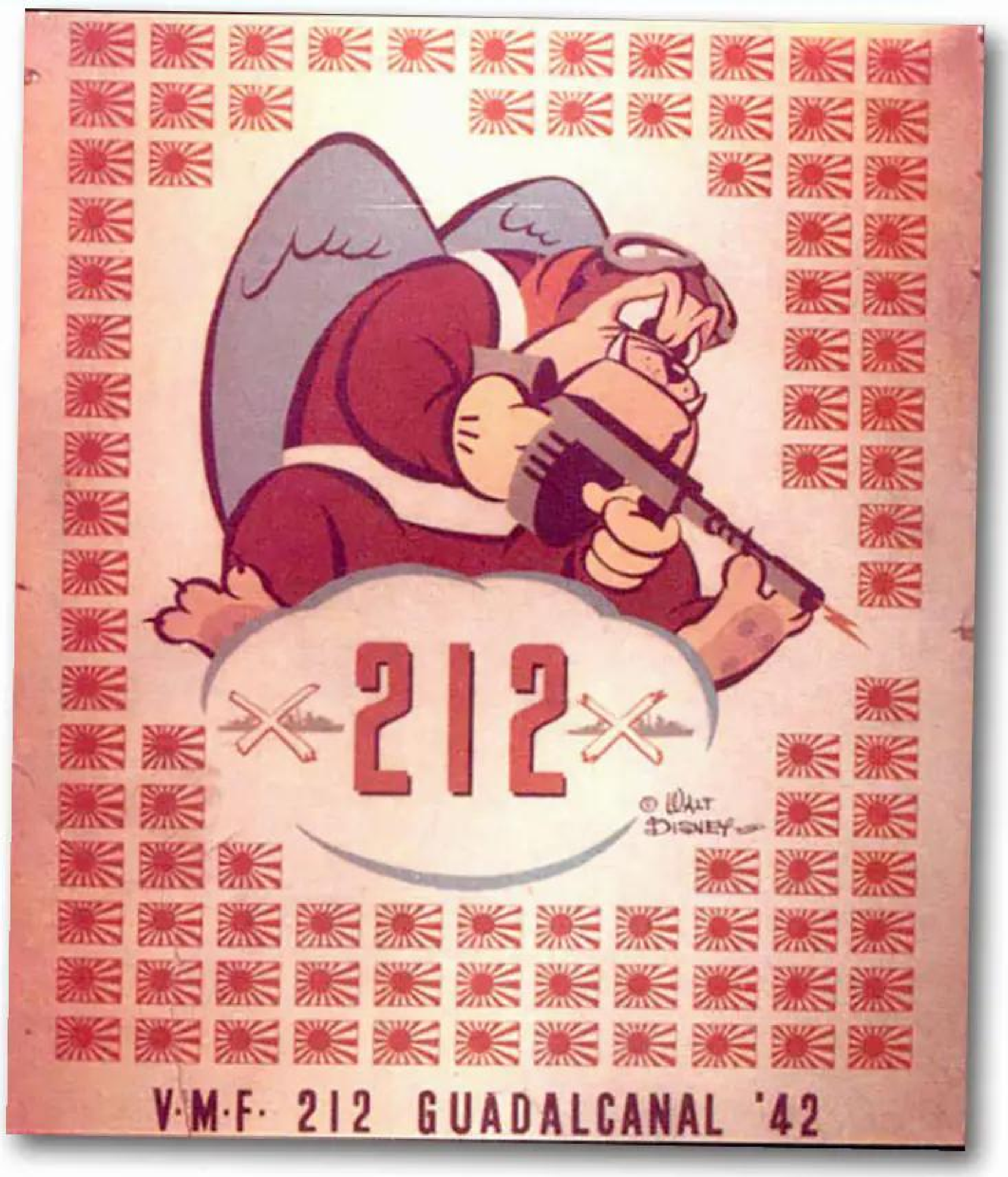
as it came at him from slightly above. As its bullets flew by his F4F he thought he heard some of them strike it. However, after arriving back at Guadalcanal he found it to be unmarked. He had only imagined that it was being hit! McMahon also flew a second tour with VMF-122, scoring one more victory with it to bring his total to four.

Captain Reinburg's division was at 16,000 feet, several thousand above the SBDs. As the bombers began their dives on the destroyers, enemy fighters were spotted. The F4F pilots dove on these nine Oscars from out of the sun. They were in turn spotted by the Japanese pilots, who then climbed toward them head on. Reinburg opened up on their leader at 1200 yards, and he instantly returned his fire. As he recounted later, "I was elated to see my gunfire converge on the Zero's [sic] engine and kick off sparks like a grinding wheel does." The two fighters passed each other in an instant and Reinburg was unable to see what happened to his opponent. Other Japanese fighters were now diving into the fight, which then degenerated into a mass of milling Ki-43s and F4Fs. Capt. Reinburg (who was flying F4F-4 BuNo 03440) later related what occurred when he targeted another Oscar:

"Just as my guns began to bark at the Zero dead ahead of me, he made a violent pull-up. This made my bullets pass harmlessly below him so I also pulled back on my control stick, hoping to re-establish the proper aim on him. The G loads quickly became heavy on my body and prevented me from getting my airplane's nose high enough to put the gun sight pip slightly above him for the proper lead. Suddenly, the G loads relaxed and I squeezed my trigger again. It instantly was apparent that I was looking at the horizon upside down. The Jap had led me into a tight loop. However, his aerobatic ability did him little good as he exploded with surprising suddenness as my concentrated lead converged on him."

Reinburg then fell in behind another Oscar passing from right to left. As he struggled to place the rapidly rolling enemy plane in his sight, tracers began whizzing by his Wildcat and he saw yet another Ki-43's flashing gun muzzles in his mirror. He managed to escape from it in a fast-turning dive, during which he spotted one more Oscar below him. He made a diving head-on attack on it, seeing hits but no return fire. He quickly reversed course after it flashed by close underneath him but saw no further sign of it. He did see three black smoke plumes and two parachutes and hoped one of them belonged to his last opponent.

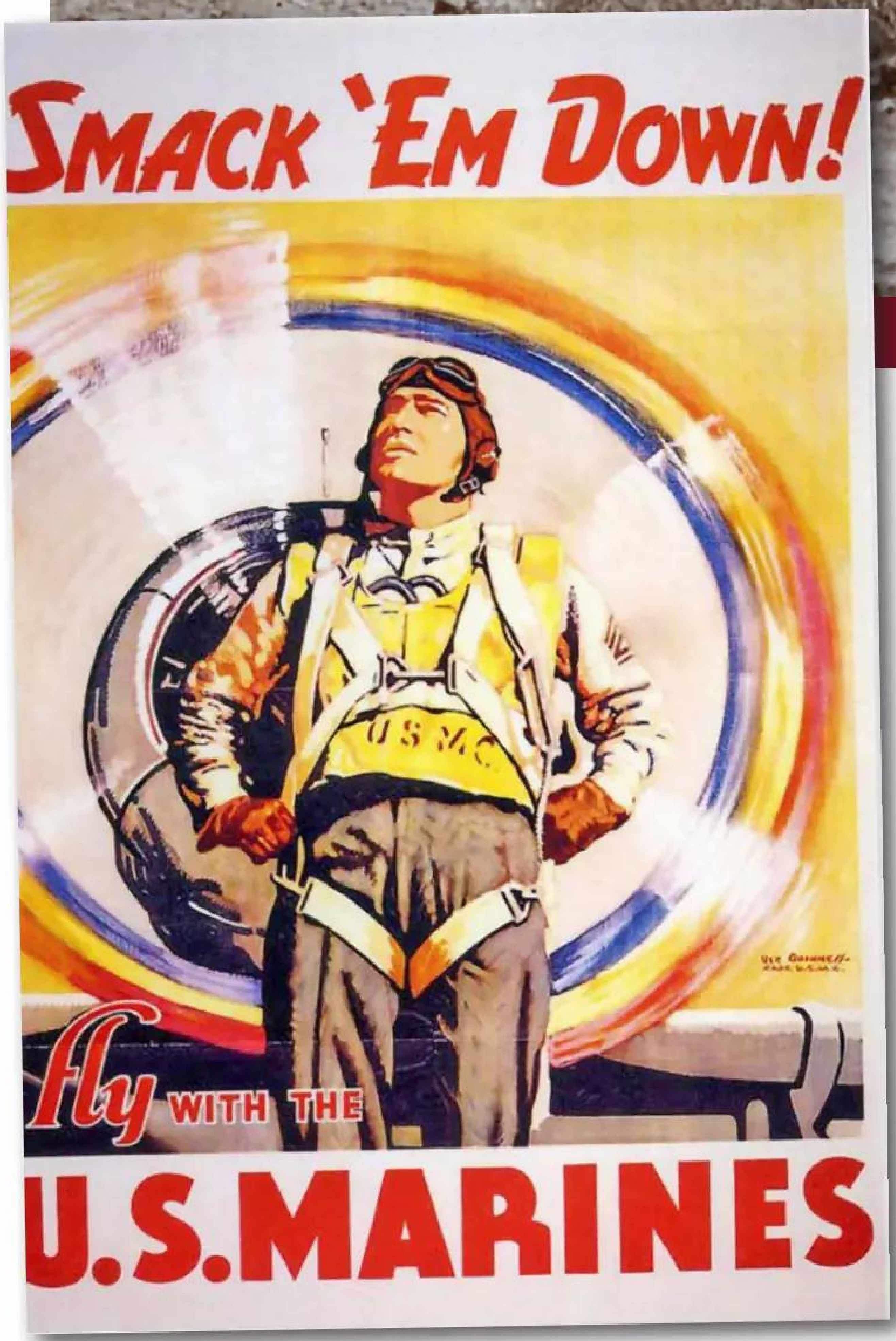
Eight F4Fs then joined up with the SBDs. Lundin, Moore, and Hearn — Reinburg's wingman — were missing. Sandy Hearn, who had been wounded in the leg, returned to Guadalcanal on the 27th, having been rescued by friendly natives, as was happily so often the case.



Henderson was base for other Wildcat units including VMF-212.

At this point Effie Pierce's voice was heard over the radio: "Hey fellows, I'm hit; my leg is bleeding. I gotta get home in a hurry." Captain Reinburg formed up on Pierce to escort him home, while delivering constant encouragement over the radio. Pierce's voice reflected his growing weakness, and it was decided that he would be unable to land his F4F. So Reinburg coached him to bail out near some USN ships off Guadalcanal's coast. Fortunately, Pierce had enough strength left to climb out of his cockpit, jump, and pull his ripcord. He was immediately plucked from the sea by a nearby destroyer and returned later after having

The Wildcats of VF-11"The Sundowners" also operated out of Henderson.



The victories at Guadalcanal gave a great boost to USMC aviation.

received some medical attention.

In these actions on the morning of 15 January 1943 the Marine F4F pilots were credited with destroying 16 enemy fighters, including VMO-251 members Loban and Moore, with two apiece.

The VMF-121 pilots who scored were: Capt. Pierce, with three victories, which gave him a total of five and made him an ace; Lieutenants Long (in F4F-4 BuNo 03544) and Mueller with two each, plus one damaged by the latter; and, with single victories, Captains Harry Coleman and Reinburg and First Lieutenants Hearn, Lundin (plus a damaged credit), and Frank Williams. The P-39 pilots were credited with two probables. These successes were at the cost of four Wildcats but no pilots, although, as noted above, three of them were wounded.

Since Joe Foss arrived at Guadalcanal on New Year's Day for his and his Circus' second combat tour, he had yet to encounter any enemy aircraft, but that changed, big time, on the afternoon of the 15th, when he led his two divisions on another SBD escort, this time to target a Japanese transport and a destroyer that had been left dead in the water by an attack earlier that day. Around 1815 hours the American formation was attacked by some Zeros in the vicinity of New Georgia and Kolombangara Islands. Foss (who was flying F4F-4 BuNo 11724) recalled this mission in a memoir he wrote later in the war:

"Before we reached the target, Capt. Loesch was forced to return to Henderson Field because of engine trouble, leaving seven planes in my flight. We were accompanied, however, by several Army P-39s.

"As we neared the ships, the P-39s were attacked by a swarm of new square-wing Zeros [A6M3s, Allied code name "Hamp"], supposed to have added speed and climbing ability. Three of my boys [his second division], led by Bill Marontate, went down to get in on the fun. I remained at altitude because several Zeros were circling there also.

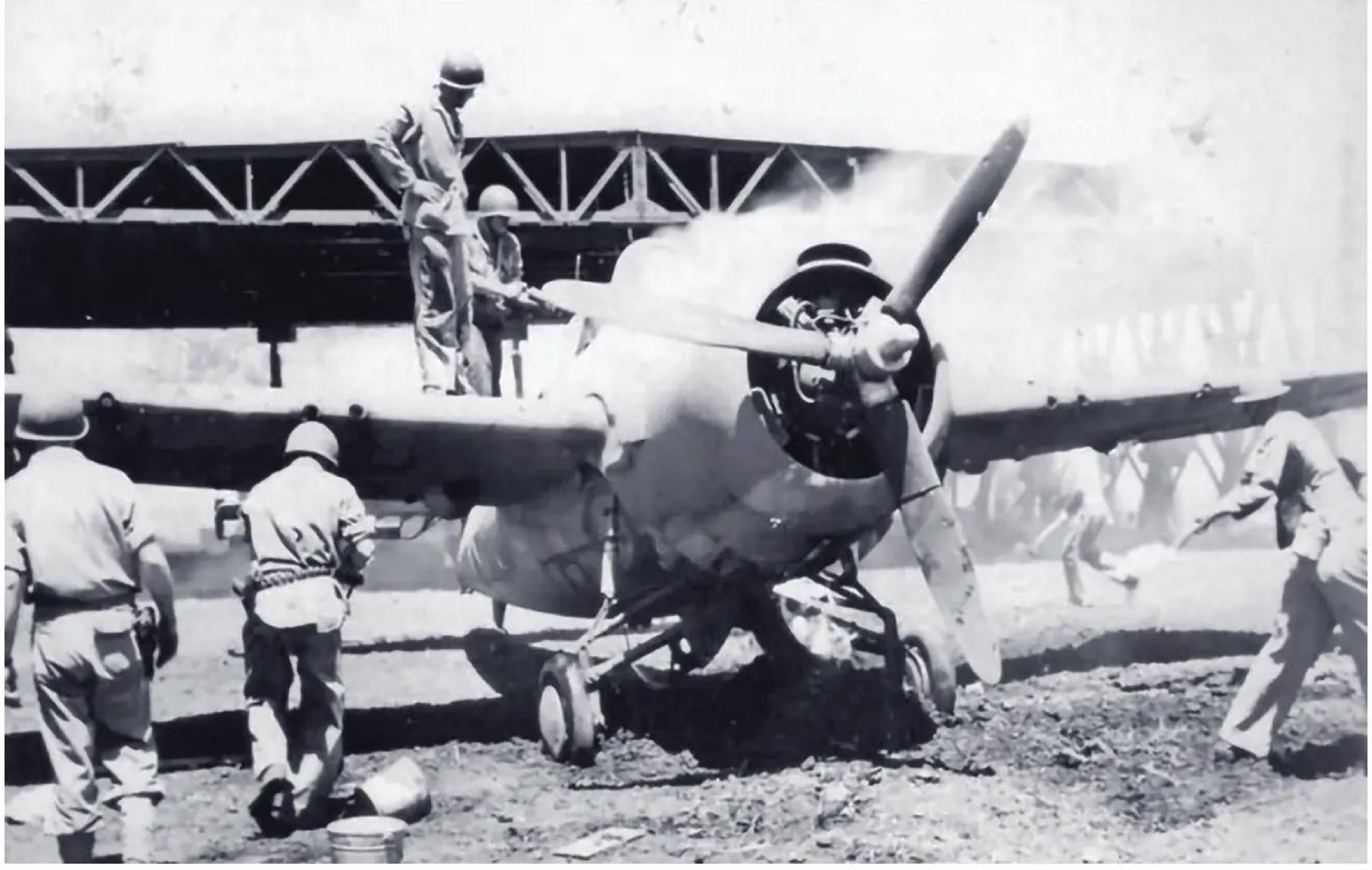
"In short order there were several Jap chutes in the air. I saw one Wildcat too, its left wing missing, spinning slowly toward the water at about a 45° angle. This was apparently Lt. Marontate.

"The fight moved upward. I fired one short burst at a Zero but didn't get a hit. He dove to a lower altitude and I let him go. Then in the distance I noticed a Grumman, piloted by Oscar Bate [in F4F-4 BuNo 03476], coming my way, surrounded by Zeros that seemed to be sparring for a favorable position. I turned and started in that direction.

"As I turned, a Zero dove directly in front of me at close range, apparently not seeing me. I gave a short burst that must have been just right, for he exploded at once.

"Before I could blink, a Grumman dove in front of me with a Zero some distance behind, trying to get a shot. I fired, but was so close I couldn't observe the effect. As he passed, I looked around, however, and saw him burst into flames and spin down. He didn't blow up.

"Bate was off to my right with a Zero about a hundred yards behind, pulling into a good position to shoot. When the Zero was about 500 feet below and shooting at



Japanese air attacks could come at any time. This VMF-121 F4F-4 was hit by shrapnel, causing a small fire that was being put out when photographed.

the Wildcat, I started firing. As my bullets crossed in front of him, he pulled up and came at me head on, his guns pumping.

"By this time, we were both firing, but neither of us registered. I still can't figure out how that happened. My tracers were going over his hood; if they had been a few inches lower, they would have brained him. His shots at me came the same way. We were so close I could plainly see the pilot and the green strip in front of the windshield to keep glare out of his eyes. The cowling was bright red. We were curving around each other angrily, missing our targets by inches, unable to find a proper angle to get hits. It was one of the most nerve-racking situations I was ever caught in.

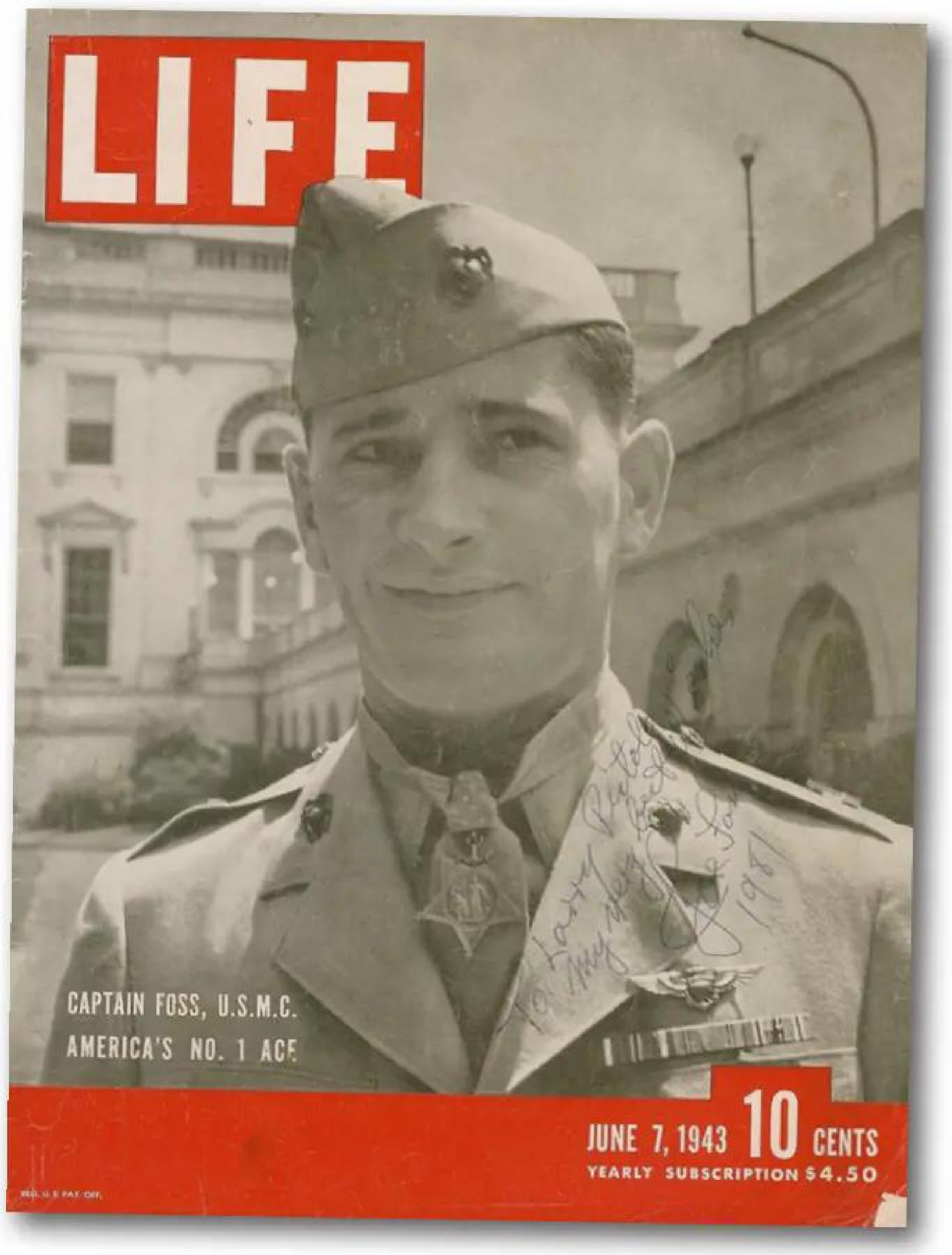
"He suddenly straightened out, climbed, made a turn around, and we came back at each other. He was above, coming down, and I was going up. Shooting head on, he made a right turn, giving me a chance to get on the inside. As I fired, it looked like my bullets were going into the side of his cockpit. I was off at a little angle.

"His plane dove from 2000 to 4000 feet below me, made a big circle to the right and came back in my direction. I intended to go over and take another shot at him, but approaching Zeros changed my mind. Just as he passed me at about 100 yards, smoke started pouring out. By that time I was headed in the opposite direction toward a cloud. I kept watching, hoping fire would break out. When he was a half mile way, he burst into flames and started on down.

"I dove into a cloud and traveled along its edges for some time to get my composure back. Emerging, I was directly in front of an approaching Wildcat. The pilot turned out to be Bate. We flew home in the rain. It got dark several miles from the field, so we had rain and darkness to make the trip in. Bombs fell on the field as we were landing.

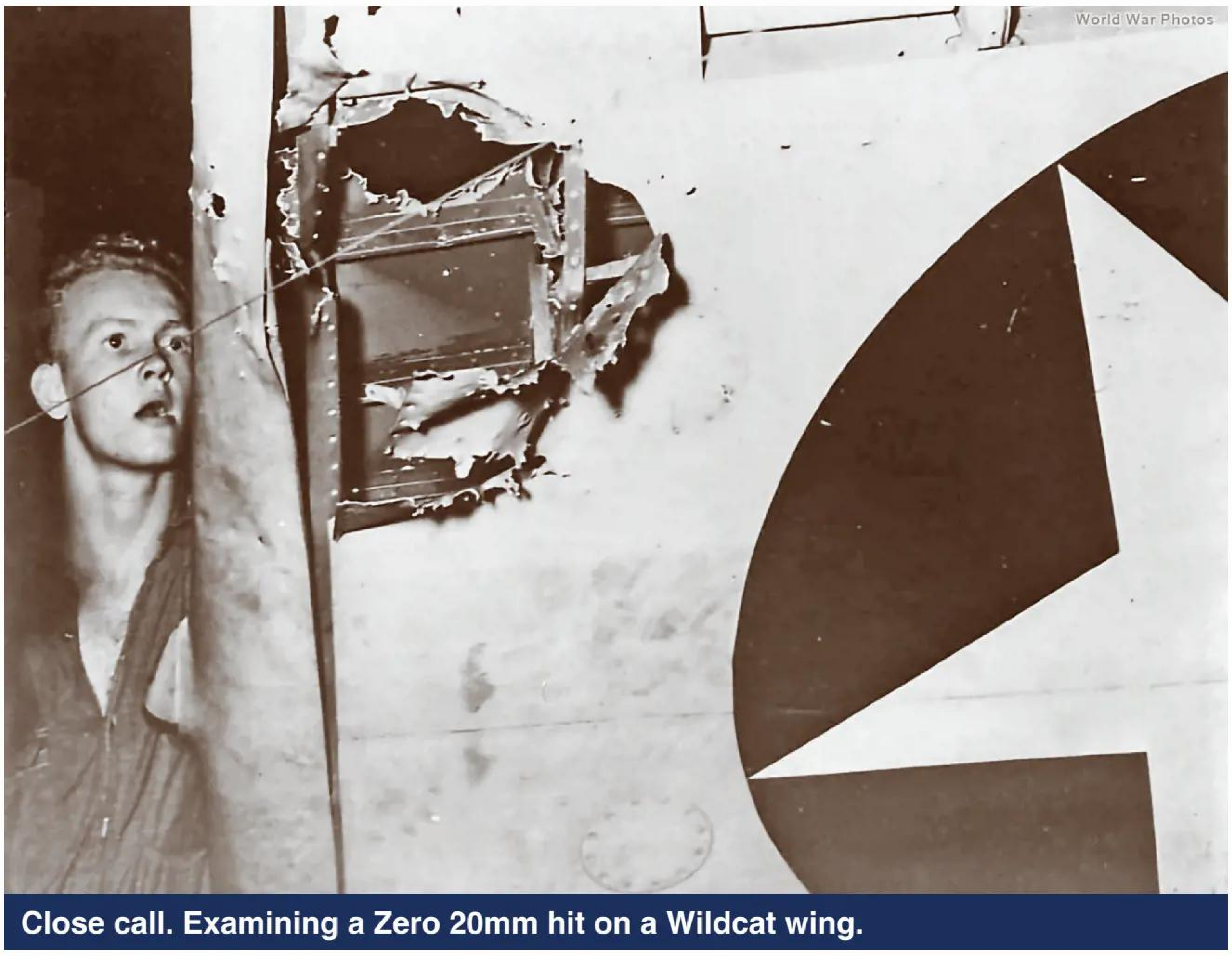
"Everyone returned with the exception of Bill Marontate. He must have had a head-on crash with an enemy plane. Before he went down, however, the other two boys with him, Presley and Bate, saw him shoot down one Zero. A gunner in a dive-bomber said he saw him bail out safely. There were six other chutes in the air then, and all went down near the Jap destroyer. Our only hope is that Bill is a prisoner."

It turned out that 1st Lt. Marontate was, in fact, killed. He had added three victories that month to the ten he scored during his first tour. First Lieutenants Bate and Presley and 2nd Lt. Furlow each also scored a single victory in the 15 January actions. This was Oscar Bate's only kill of his second tour, giving him a total of four. He scored one more Zero later while flying Corsairs in the Philippine Islands with VMF-218, to make ace. With his victory that day 2nd Lt. Tom Furlow had his final total of three, while Frank Presley was now also an ace, having scored two kills during his first tour and three on his second. Captain Greg Loesch had added two victories to



Joe Foss on the cover of the 7 June 1943 issue of *Life*.

Joe Foss leading his Flying Circus on patrol.


World War Photos

Close call. Examining a Zero 20mm hit on a Wildcat wing.

USAAF P-39s and P-400s often flew in conjunction with VMF-121.

the 6.5 he scored earlier and his fellow Circus pilot 1st Lt. Bill Freeman one to his previous five.

Foss now had his final total of 26 air victories, cementing his (temporary) position as America's leading World War II ace. He had also matched the record of the US Air Service's top World War I ace, Capt. Eddie Rickenbacker, which was highly publicized at the time even though the comparison wasn't really accurate, since Rickenbacker's 26 victories included four balloons, which credits would have not been allowed by any WWII air force. It was really about morale and public relations.

Foss and his Circus flew their last mission on 25 January, when 30 JAAF planes were intercepted as they approached Guadalcanal. The two divisions, led by Capts. Foss and Loesch, were scrambled at 1315 hours and climbed to 18,000 feet. They were joined by four Lockheed P-38 Lightnings of the USAAF's 339th FS. The American fighters circled over the enemy planes as some Oscars (once again misidentified as "Zeros") tried unsuccessfully to lure them into a fight, and away from the bombers they were escorting. Instead, they kept the Ki-43s distracted as other American fighters took off from *Cactus*. The latter included two more VMF-121 divisions led by Trigger Long and Maj. Yost, who had finally been released from hospital.

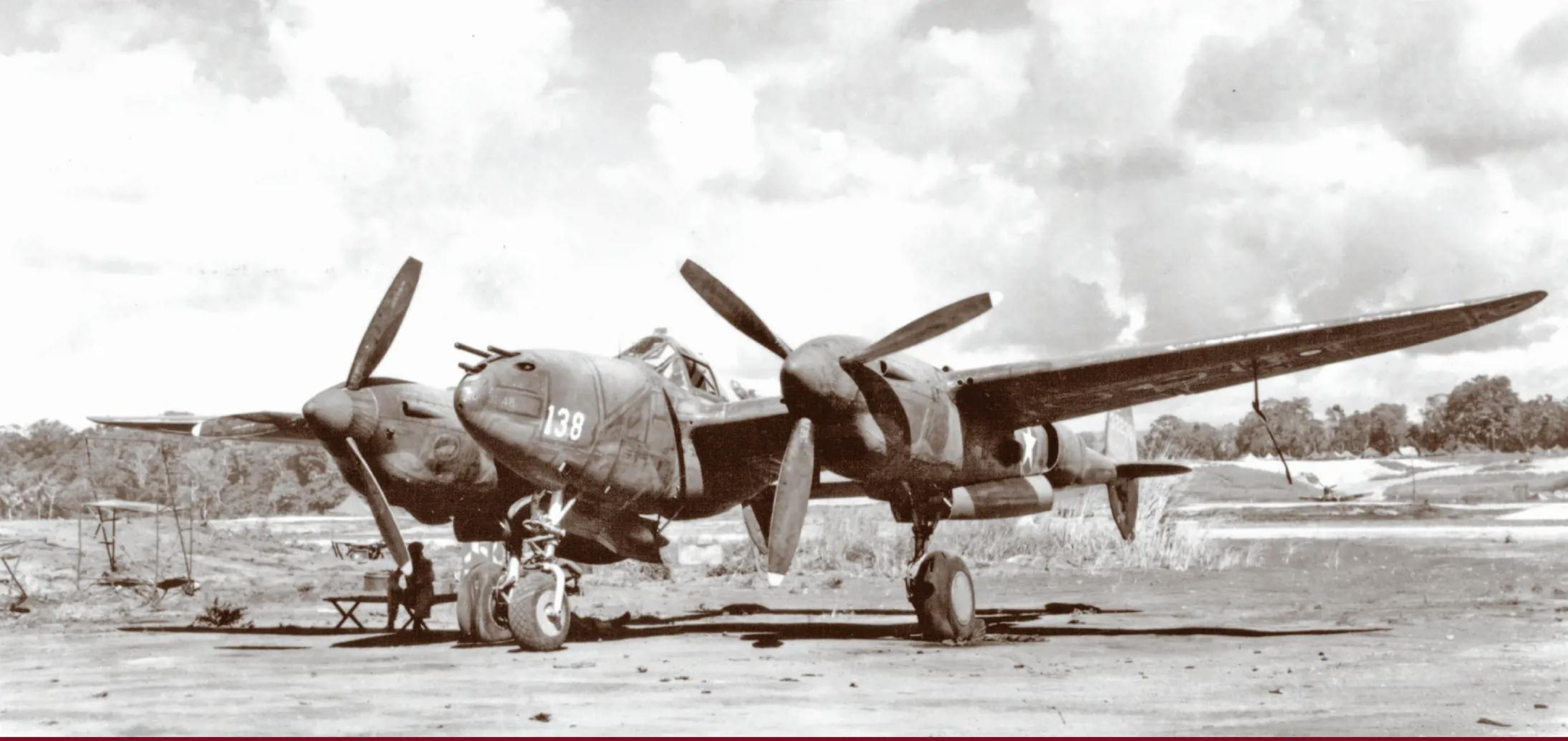
The Japanese pilots finally decided they didn't like the odds and departed, after the P-38s had shot down two of their planes and the original combat air patrol over the island, comprised of four F4Fs of VMO-251, had claimed four more "Zeros" destroyed and three probably destroyed. None of the VMF-121 pilots fired a shot.

The squadron's last air victories of its second tour were scored by Capt. Reinburg two days later. His division was scrambled after many enemy aircraft were reported approaching the island, even though his plane had no radio, it having been removed for maintenance. The Wildcats began circling at 25,000 feet, and Reinburg, via hand signals, instructed his wingman, Shorty Mueller, to take over the lead since his plane did have a functioning radio. The division's second section had returned to base due to one of its planes having a faulty oxygen system.

Reinburg (who was flying F4F-4 BuNo 03549 that day) soon spotted many Zeros 4000 feet below them. He signaled to Mueller, assuming that he would follow him, then dove on the Mitsubishis. Reinburg found out later that Lt. Mueller had been ordered over his radio to remain at altitude and wait for the enemy bombers instead of attacking the Zekes. As it turned out, the former turned back before reaching Guadalcanal.

Captain Reinburg dove on a Zero flying straight and level and opened fire on it. It then began a sharp-climbing left turn, and he rolled left to try to keep it in his sight. He flashed past the Zero and pulled out of his dive 2000 feet below, losing track of it in the process. As he recalled later, "I was sure my bullets had hit the Zero, but I went below him so quickly it was impossible to ascertain any damage. However, as full sight returned to me following a near blackout, I was happy to see his plane burning and plunging toward the Guadalcanal jungle."

He then zoomed up to 20,000 feet and saw another Zero coming toward him 3000 feet below. He made a diving firing pass at it but again saw no trace of the A6M after pulling out. He then saw another Zero 2000 feet below him departing at a 90° angle a half mile away. Its pilot spotted Reinburg and climbed toward him as the captain rolled and dived on him, opening fire at 1500 feet from an upside down, almost vertical, position. At 900 feet the F4F's machine-gun fire converged on the



VMF-121 pilots flew a joint intercept mission with the Lightnings of the 339th Fighter Squadron over Guadalcanal on 25 January 1943.

Zero and it exploded.

Climbing once again, this time to 17,000 feet, Reinburg saw six more Zeros ahead of and above him. He began a stealthy approach on the rearmost plane, 2000 feet away. He managed to sneak under this Mitsubishi and fired, but only his right outboard gun was working, causing the Wildcat to snap roll into a diving turn. Reinburg then decided that it was time to head for home, as he was also short of fuel and had spotted several of the other Zekes turning toward him. He had seen some of his tracers enter the last enemy plane but could only claim it as damaged. Arriving back at Fighter Two he performed a celebratory victory roll.

Captain Reinburg's two confirmed victories that day, his second and third, brought VMF-121's score for its second, 37-day, tour to 55 — not including nine kills by VMO-251 pilots while flying as part of VMF-121 formations. On 28 January, the squadron completed its second tour.

Its successes had certainly not been without loss and adversity. Six of the squadron's pilots were killed, and a few others' combat tours either came to an end or were interrupted by injuries or illness. And many of its F4F-4s were lost — shot down outright by enemy action or ditched in the sea, or written off upon their return from a mission due to egregious battle damage (of which the Wildcat could absorb an amazing amount and continue to fly). All of its men had been negatively affected by the miserable living conditions on Guadalcanal, including the heat and humidity, the insects, the air raids, the poor food (which Shorty Mueller remembered as mainly coffee, Spam and bread), and, of course, malaria.

USMC fighter pilots in the Pacific were normally required to fly more than one combat Tour — it was often three, and with different squadrons. Most of VMF-121's surviving second tour pilots flew at least one more, and in many cases two. Eight of them flew Corsairs in the Solomons with VMF-122 during the summer of 1943, including, as noted earlier, Bill Lundin and John McMahon — also Trigger Long, who scored three victories with it for a total of six, and Hunter Reinburg (four more for his total of seven). In 1945, Don Yost commanded Marine Carrier Air Group 4 aboard the USS *Cape Gloucester* as a lieutenant colonel and scored two more victories over Japan while flying F4Us with its VMF-351, for a total of eight. Herb Long was also a carrier pilot late in the war, and scored four additional victories while flying Corsairs with VMF-451 from the USS *Bunker Hill*, for his grand total of ten. Effie Pierce's second tour was actually with VMF-121, on its third, also flying F4Us in the Solomons in the summer of 1943. He scored one more victory for his final total of six. **AC**

VMF-121 Wildcats at Fighter Strip 2. Note the anti-aircraft emplacement.

(continued from page 45)

The crew of the lone He 111H bomber.

that Rommel supply him with enough aircraft, vehicles, and troops whereby he could “invade” Fort Lamy and capture the entire area. This was probably wisely turned down. Still, Blaich got busy with his maps and the help of “navigator” *Maggiore* Roberto Count Vimercati-San Severino (who would also pilot the SM.81).

Blaich’s plan was nothing if not audacious for the bomber would have to fly a rather stunning (for the *Luftwaffe*) distance of 1250 miles. To do this, *Campo Uno* (Camp 1) was established and it was a remote natural airstrip located at Bir Misciuro in southern Libya. It has been discovered during 1935 by Vimercati-San Severino when he landed at that location while on a safari. He sketched out his own map of the area but noted there was a lack of any form of facilities, especially water. This is where the lumbering *Marsupiale* came into play. The aircraft made several flights to *Campo Uno* where barrels of fuel, oil, water, and other supplies were dropped off, camouflaged, and put in place for the upcoming raid.

Count San Severino with the Heinkel at *Campo Uno* prior to the long-range attack.

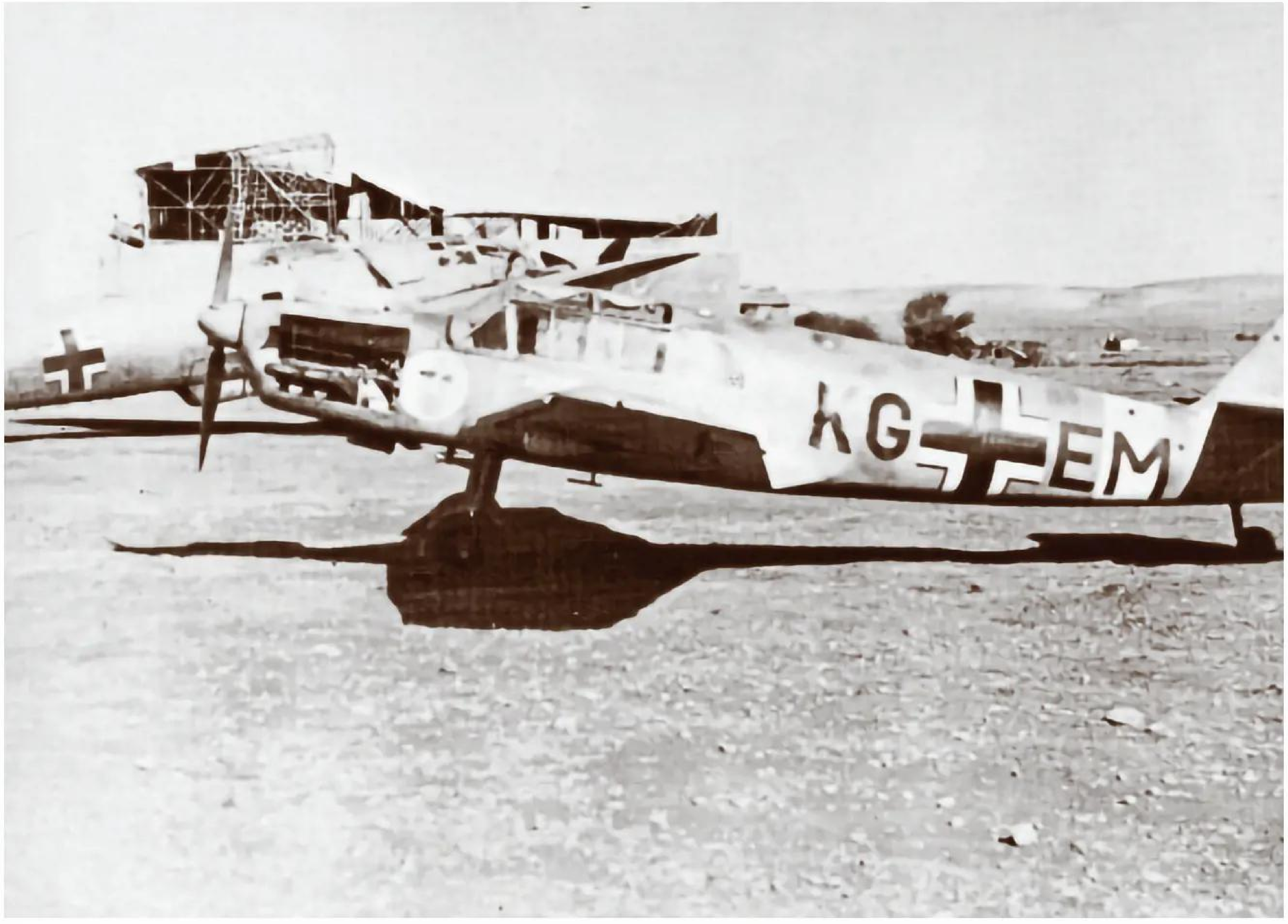
Fueling the Heinkel prior to the raid. All extraneous weight had been removed from the bomber to extend its range.

The actual raid would begin from the Italian airfield established near the mythical 11th Century caravan trade center of Sabha in southern Libya. From this field, the He 111 would depart and head south on 20 January 1942. Blaich would then launch in his Messerschmitt Bf 108. He would be followed by Sansverino in the tri-motor SM.81. The three aircraft would then arrive at *Campo Uno*. The planes would be serviced and the Heinkel would be made ready for its daring attack. Every fuel tank was filled to capacity with 1200 US gallons of fuel and the 16 130-pound bombs were fitted into the bomb bay. The dorsal and ventral machine guns and associated equipment were removed as a weight-saving measure but this would leave the Heinkel relatively defenseless if the craft ran into Allied fighters. Blaich would be part of the Heinkel's crew and he left his Bf 108 (which was painted in desert camouflage along with the *Luftwaffe* coding of KG+EM) in the care of another pilot. The crew of the bomber consisted of Blaich; Franz Bohnsack, pilot of the He 111; Heinrich Geissler, engineer; Wolfgang Wichmann, radio operator; Fritz Dettmann, war correspondent who was aboard to record details of the mission, and Roberto Count Vimercati-San Severino.

Throwing up a giant rooster tail of dust and sand, the Heinkel began its takeoff roll at 8 am on the 21st as the team anxiously watched. With its maximum load, the He 111 slowly lifted off for the start of its long flight to Fort Lamy. About an hour after takeoff, they ran into a sandstorm even though the meteorologist at Hun (Houn — about 40 miles south of Tripoli) had forecast fine weather. Later, among the many confusing statements involving the raid, one source stated that the meteorologist was actually a British secret agent.

Arriving over target at 2 pm, the Heinkel crew was elated to find they had taken the Allies by surprise. Using photos and visual sightings, the fuel dump and parked aircraft were clearly visible to the crew as they began their bombing run. Their limited bomb load also meant that limited damage would be achieved but the raid was actually quite successful.

The striking force at *Campo Uno* — Messerschmitt Bf 108, Fiat 1500, and Heinkel He 111H.



It is rather amazing that with such a small force that the *Sonderkommando* was able to pull off the raid.

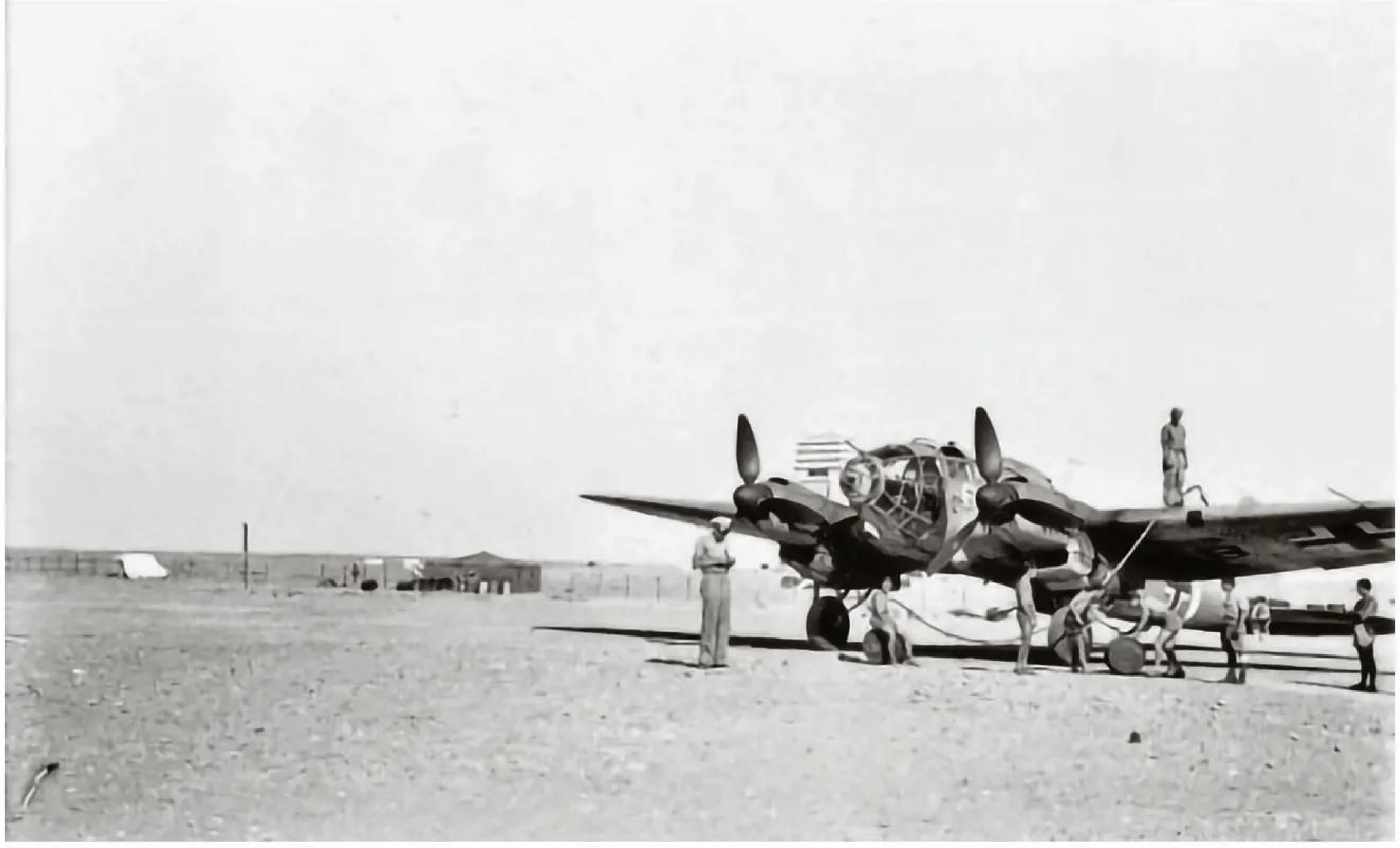
As personnel on the field either ran for cover or attempted to man anti-aircraft weapons, the bombs tumbled from the Heinkel's bomb bay and dropped onto the large fuel depot. After the run, the pilot turned the Heinkel to head away from the target and the crew was rewarded with the satisfying sight of massive explosions as the bombs lit off the fuel storage tanks. Several aircraft were also blazing but there was little time for observation as the Germans knew they had to depart the area was fast as possible.

Exhausted by the flight and the bombing raid, the crew now had to face the droning flight back to *Campo Uno* but this is where the plan started to come undone. Flying over the uncharted desert, whose sand was blistering during the day and freezing at night, the Heinkel headed for base as the sun was dropping into the mountains lining the western horizon. They had to skirt weather and this consumed valuable fuel since the flight was extended to bypass the storms. Unreeling their 328-foot trailing antenna, messages were broadcast concerning the He 111's situation but no replies were received, again probably due to weather.

At 6 pm, the crew went over the distance covered and compared it to fuel consumption. Even the most optimistic of figures gave them only another half-

The single Heinkel caught the Allied forces at Fort Lamy completely by surprise and the bombing destroyed several fuel depots.

Although the amounts of fuel (and aircraft) destroyed varied in Axis and Allied accounts, it is no doubt the raid was a great propaganda success.



Running short of fuel, the He 111H made an emergency landing in the desert and the crew would wait five days for rescue.

hour of fuel. The pilot leaned the engines out as much as possible and set the propellers at 1950-rpm to extend range. They began searching for a landing spot while sending transmissions of their location but the storms seemed to play havoc with the radio. Spotting a flat piece of desert located between two mountain ranges, the pilot decided that this would be the landing spot. Lowering gear and flaps, the Heinkel headed for the sand as the mountains threw long, dark shadows over the landing ground.

Shutting down the engines after safely touching down, the six men departed the bomber to find themselves in complete silence. Their navigation showed that they were about 80 miles southwest of *Campo Uno*. As the sun set, the freezing night rapidly fell upon the Germans and they got back in the fuselage and tried to stay as warm as possible while also taking stock of their supplies and situation.

They had a limited amount of food but, most distressingly, had just a bit over four gallons of water and Blaich knew that the blazing daytime temperatures would rapidly dry them out. Not knowing how long they would be on the ground he took control of the water supply and carefully began to ration out the precious liquid.

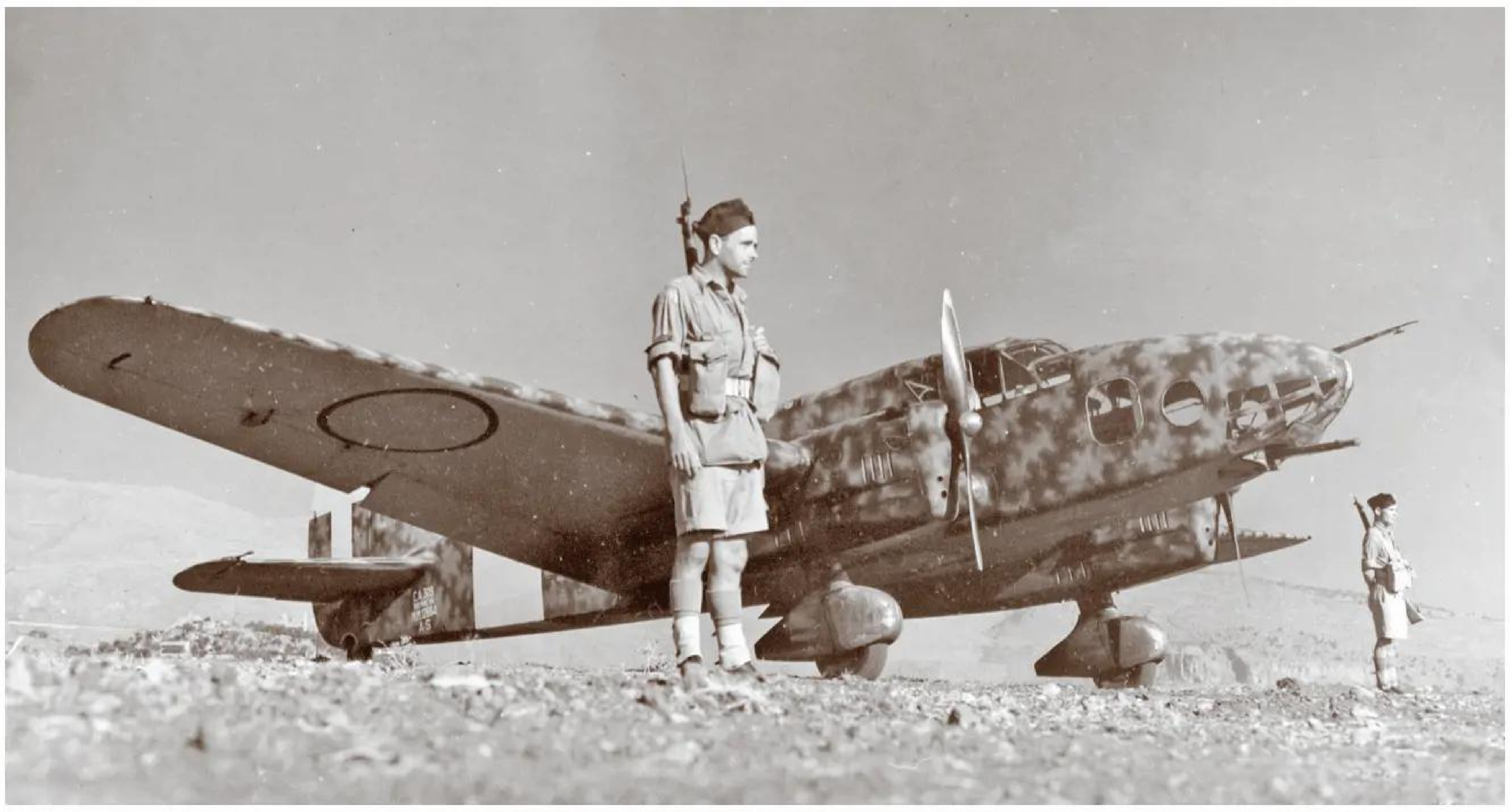
Early the next morning, the men set up the trailing radio antenna on tent poles and began sending out messages. However, they did not receive any reply as the day dragged on and the temperatures forced them to take refuge under the broad wings to escape the deadly rays of the sun. The lack of a reply was extremely discouraging and the oncoming night forced them back into the fuselage in an attempt to avoid the freezing temperatures but the interior of the Heinkel was only marginally warmer than the desert.

On the morning of the 23rd, the Germans once again were busy sending radio messages at 6197 kHz. Around noon, they received a very weak signal from the German *Fliegerfuhrer Afrika* in Benghazi, which was some 650 miles to the north. However, they could not reach the Italian support crew at *Campo Uno*. The signal did trigger a search response and Italian and German aircraft took off from various bases to search the desert as the Germans kept up their radio signals but the weather worsened, causing contact to be lost. Three days later, they received a German radio signal stating Italian aircraft were searching for them.

The initial euphoria of establishing contact faded away and the German crew had to endure four more days and nights of alternating blistering/freezing temperatures as the water supply ran low. Geissler found a large flat rock and began carving the message on the stone "so that people could know to whom these white bones in the desert belonged."

At 5 pm on 27 January, Blaich distributed the last of the water to the crew and at this point they knew they were doomed. Perhaps they could survive two or three days in the desert without water, but each day would see a weakening of body and spirit. Then, the impossible happened as the final rays of the sun went behind the mountains.

In the silence of the desert, the Germans heard aircraft engines. A fire was lit and oil was poured onto the flames to create a trail of smoke rising into the sky. The signal was spotted by the crew of an Italian Caproni Ca.309 *Ghibli* that was part of the search area. Circling the area once to check for any obstacles, the Italians came in for a safe landing and quickly exited their aircraft with flasks of water and other supplies as they were enthusiastically greeted by the Germans.



A Caproni Ca.309 *Ghibli* such as this aircraft was part of the search group looking for the downed Heinkel. After spotting the bomber, they landed in the desert to supply the crew with water and food.

On the next day, Germans loaded a Junkers Ju 52/3m from *Wustennotstaffel 1* (Desert Rescue Squadron 1 — see sidebar) with barrels of fuel and other supplies and took off to find the downed bomber. Finally spotting the two aircraft on the desert floor, the Junkers made a safe landing and soon everyone was at work removing the fuel barrels and pumps. The Heinkel and Caproni were both replenished and the flight took off to return to *Campo Uno*.

With the limited force of his *Sonderkommando*, Blaich would carry out dangerous operations in an attempt to damage the operations of the LRDG and SAS. Using the Bf 108, he would fly into the desert in an attempt to

SWAMP CREATURE: MYSTERY OF THE EVERGLADES PB4Y
NOVEMBER 2023 · Vol.59/No.11
AIR CLASSICS
Where History Flies
EXCLUSIVE DIRECTORY! RENO UNLIMITEDS
SIX DECADES OF WINNERS!
THUNDERBIRD! IS THIS THE WORLD'S FASTEST MUSTANG?
RETURN OF RACE 64
VICKY BENZING'S PLUM CRAZY
COLORS OF WAR
RARE WWII IMAGES
MID-AIR TRAGEDY CANCELS FINAL RENO AIR RACE
ALL THE LATEST VINTAGE & VETERAN AIRCRAFT NEWS
KEEPING THEM FLYING
VINTAGE V-12s' FUTURE OUTLOOK
BULLDOG!
GHOST OF ATKA ISLAND
MYSTERY OF THE EVERGLADES PRIVATEER
DOWN IN THE DESERT
CONSTELLATION
HALL BOATS FOR THE COASTIES

AIR CLASSICS THE DIGITAL OPTION

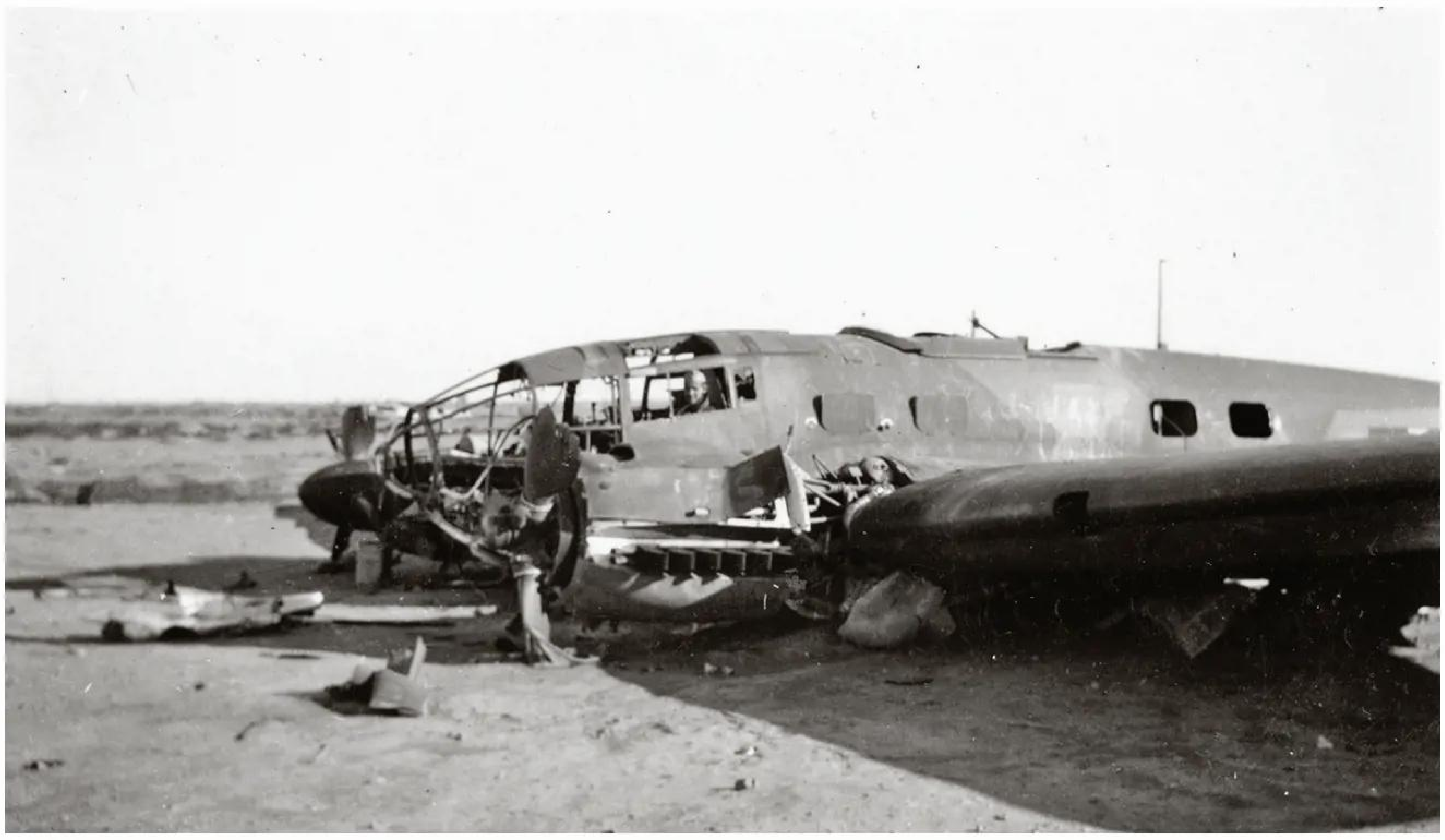
North America's largest and most popular aviation history magazine is now available in a digital format. AIR CLASSICS has entered into partnership with POCKETMAGS to distribute digital subscriptions and back issues.

Please go to the official *pocketmags.com* website and you will get the "search bar" located near the center of the page. A search for AIR CLASSICS will take you to various options for digital subscriptions and back issues.

POCKETMAGS is an international website that allows subscription payment in a variety of currencies. They are professional and will quickly handle your needs.

GO TO THE OFFICIAL WEBSITE AT *POCKETMAGS.COM.*

The rescued crew with the Italian tri-motor.



The faithful *Sonderkommando Blaich* Heinkel would go on to fly more missions before crash-landing in the desert and that was the end of the unusual little operation.

hunt the vehicles of these units. The success of these operations, which continued through the first half of 1942, is not known. During June, the Heinkel had an engine failure and the pilot put the bomber down in a crash-landing at Kufra. After enduring four days and nights in the desert, the crew was rescued but there was no way the damaged Heinkel could be saved and *Sonderkommando Blaich* came to an end when it was disbanded two weeks later.

How effective was the daring raid? The recorded results vary widely — especially those from the French. Fritz Dettmann would write glowing reports of the raid and would later author the book *Mein Freund Marseille* that included information on the attack. Later, the Germans would compare the Blaich raid to the Doolittle attack on Japan during April 1942 whereby not much damage was done but as propaganda, the raid was a resounding success. Oddly, Blaich did not record his thoughts during his stint as commander of this extremely small *Luftwaffe* unit and would die in 1975 at age 75 without much being known of his post-WWII life.

The French, as perhaps would be expected, offered numerous accounts regarding the success (or lack of) the raid and this has continued to present day with French revisionist authors making statements that favor the French. More recently, French author Alain Godec commented on the anti-aircraft defenses of Fort Lamy by writing “the officer commanding the guns did not see the German aircraft despite claims that they had clearly identified the aircraft on the approach. One gunner claims that the Bofors guns could not hit the aircraft because it was flying at 11,500-ft [as compared to 5000-ft in the official report] and even says the bombing was done north to south. The rumors among the Free French in Chad indicate the crews were either having a nap or were playing cards, apparently unconcerned given there were so many aircraft movements.”

The French would seem to be a bit confused about the identity of the single intruder and recorded that the bombing “was done at 1235 GMT by a twin-engine bomber camouflaged by large orange and brown stripes without any markings.” This is clearly incorrect since the He 111H was in standard *Luftwaffe* desert camouflage carrying national identity markings. Two unexploded bombs were found that had German markings and the local newspaper stated that “Fort Lamy was bombed by an unknown aircraft and that the bombs were of a German make.”

German and French figures on the success of the raid vary wildly. Even as recently as 2004, one researcher stated that the bombing destroyed eight Royal Air Force Hurricanes but French sources note that no aircraft were lost or damaged. There is not a lot of photographic evidence surviving today to bolster or refute these claims. What is for sure is that least some of the vital aviation fuel supplies were destroyed.

The official French report on the attack state that some 106,000 US gallons of aviation fuel were destroyed but efforts by French personnel in moving barrels of fuel saved some 53,000 gallons. Once again, modern revisionists have changed these figures and one such author claims that the Free French had some 660,000 US gallons of aviation fuel stored in and around Fort Lamy.

Today, perhaps the exact figures are not important. What is important is that a single aircraft did manage to destroy some vital fuel supplies and this caused a delay in flight operations while also causing more manpower and weapons being brought into Fort Lamy to strengthen anti-aircraft forces. Probably the real victory was in the amount of propaganda that the Germans were able to create by the raid. That so much propaganda could be generated by a small group of men, one auto, one bomber, one light aircraft, and one transport surely puts the final score on the side of the Germans. **AC**

PRESERVING THE MEMORY OF AVIATION HISTORY WITH PLANETAGS.

Gimli Glider
604 C - GAUN EXHIBIT
Gimli, Manitoba

Gimli Glider

COASTER MADE FROM THE GENUINE SKIN OF
B767 | TAIL # C-GAUN | FIN # 604
AIR CANADA 143 | 07/23/1983

C-GAUN flew through the evening sky on July 23, 1983, cruising at 41,000 feet when the unthinkable happened: both engines went silent. Air Canada Flight 143 had run out of fuel, the result of a metric conversion error. In the cockpit, Captain Bob Pearson, an experienced glider pilot, and First Officer Maurice Quintal remained calm. With no power, they aimed for a decommissioned airbase in Gimli, Manitoba. Against all odds, they brought the aircraft down safely. Remarkably, all 69 aboard suffered no serious injuries. The Gimli Glider was born, and its story lives on in your hands.

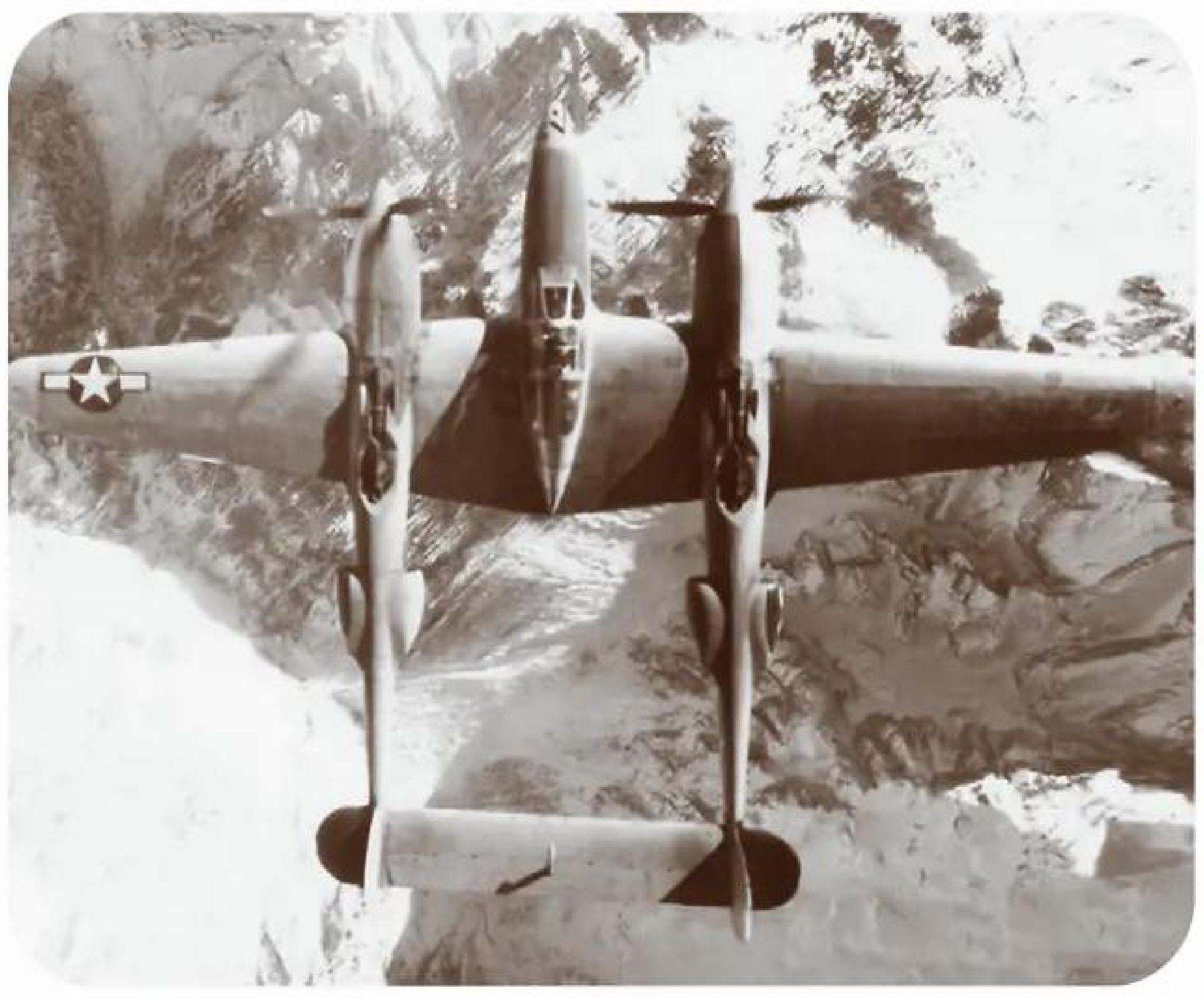
MOTO ART **PLANETAGS**®

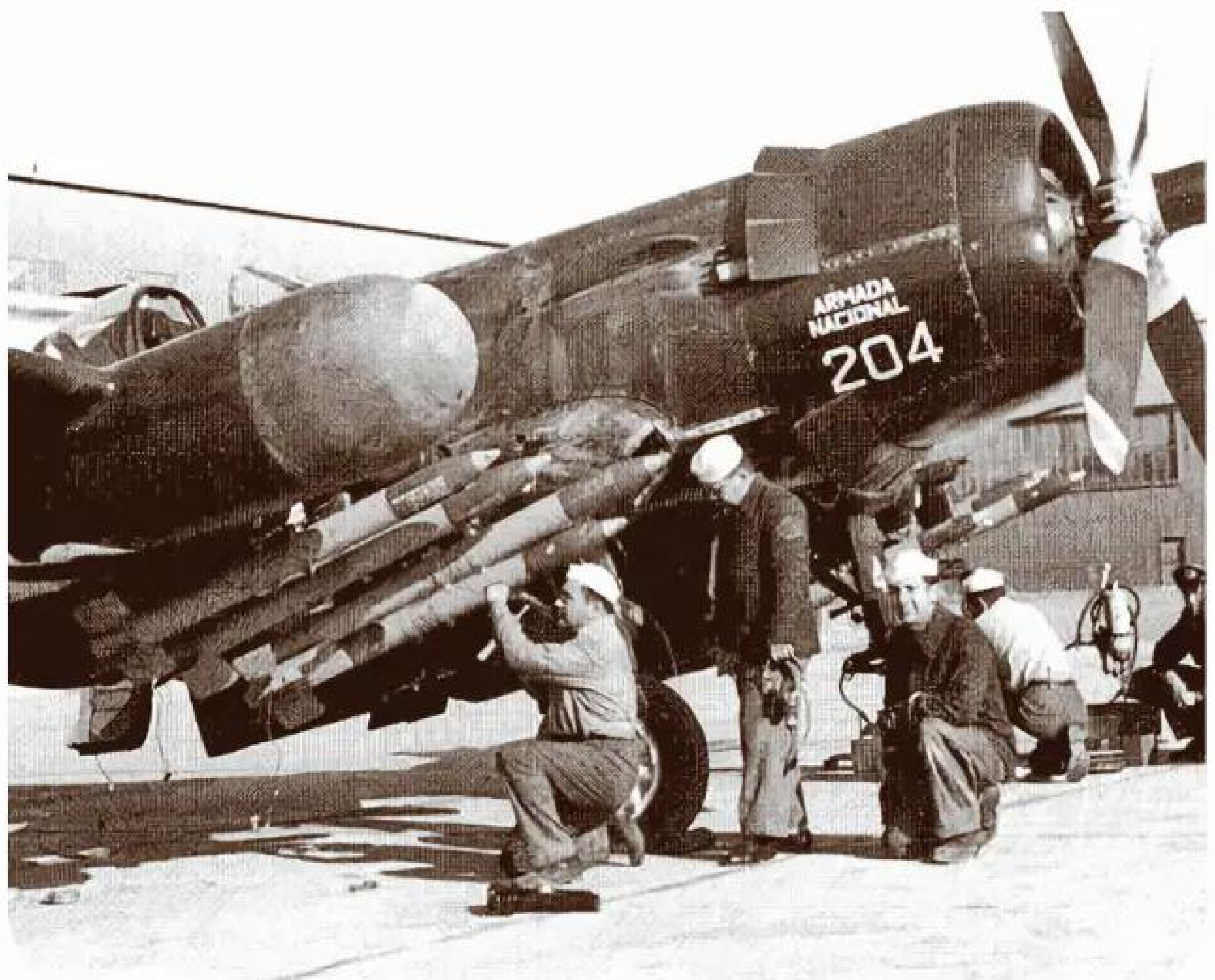
PLANETAGS.COM

MOTOART PLANETAGS LLC | TORRANCE, CA 90501

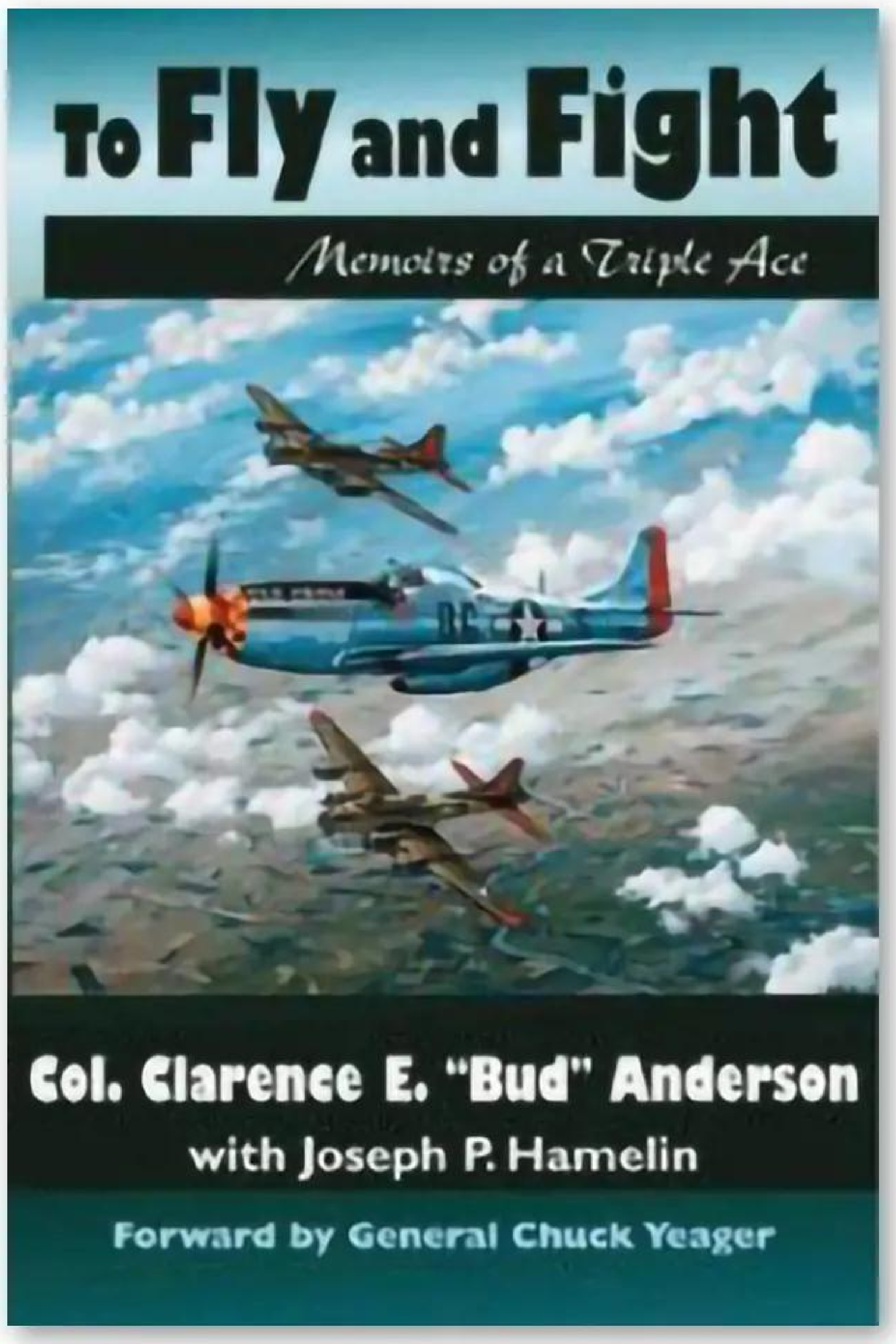
NEW TITLES FROM THE
AVIATION BOOK CLUB!

The Aviation Book Club (ABC) is pleased to present an extensive selection of books that will fit into any discerning aviation library. All books are carefully chosen by our staff and our contributors. Also, we are offering great discounts on all titles

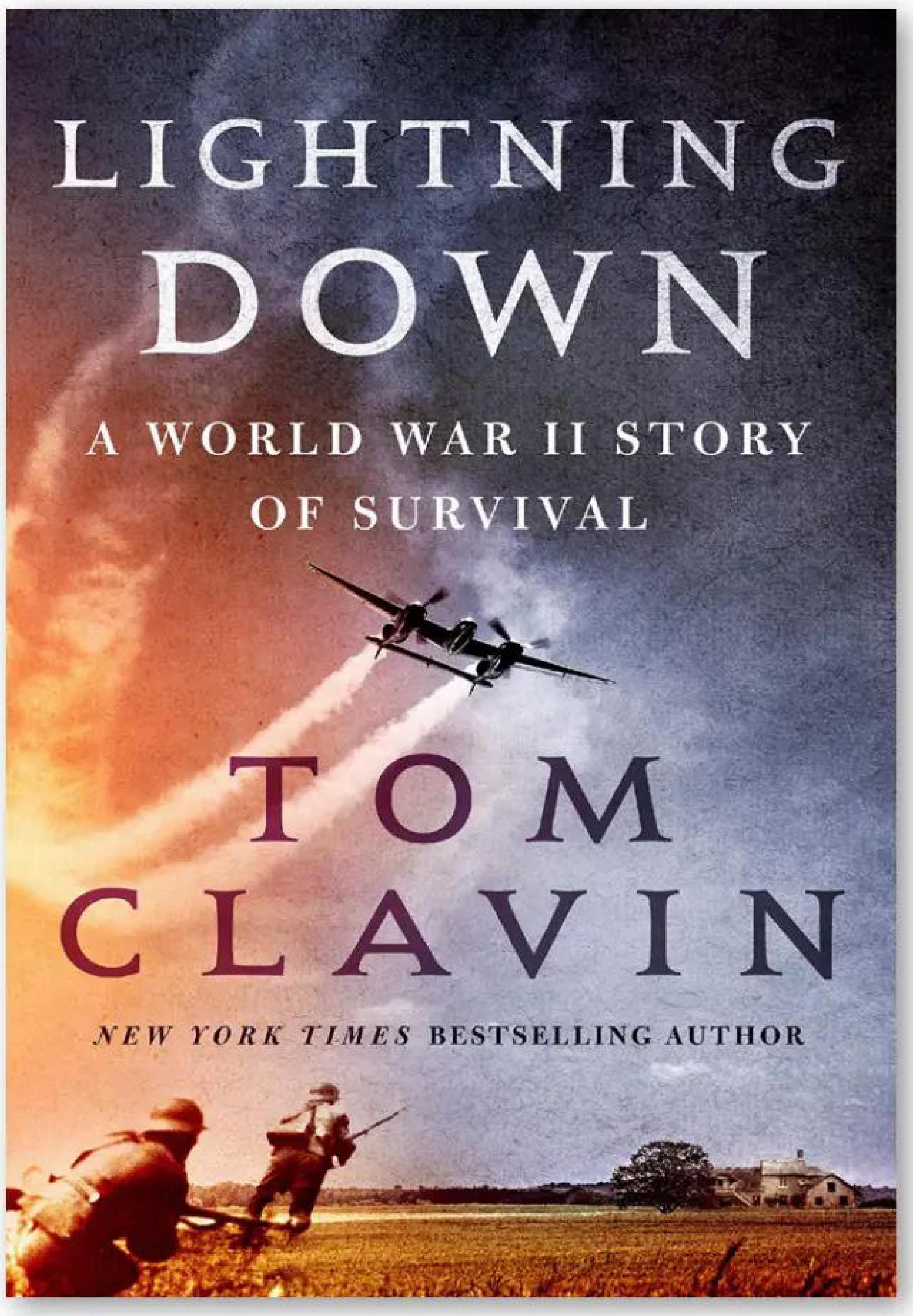



ARMADA NACIONAL
204

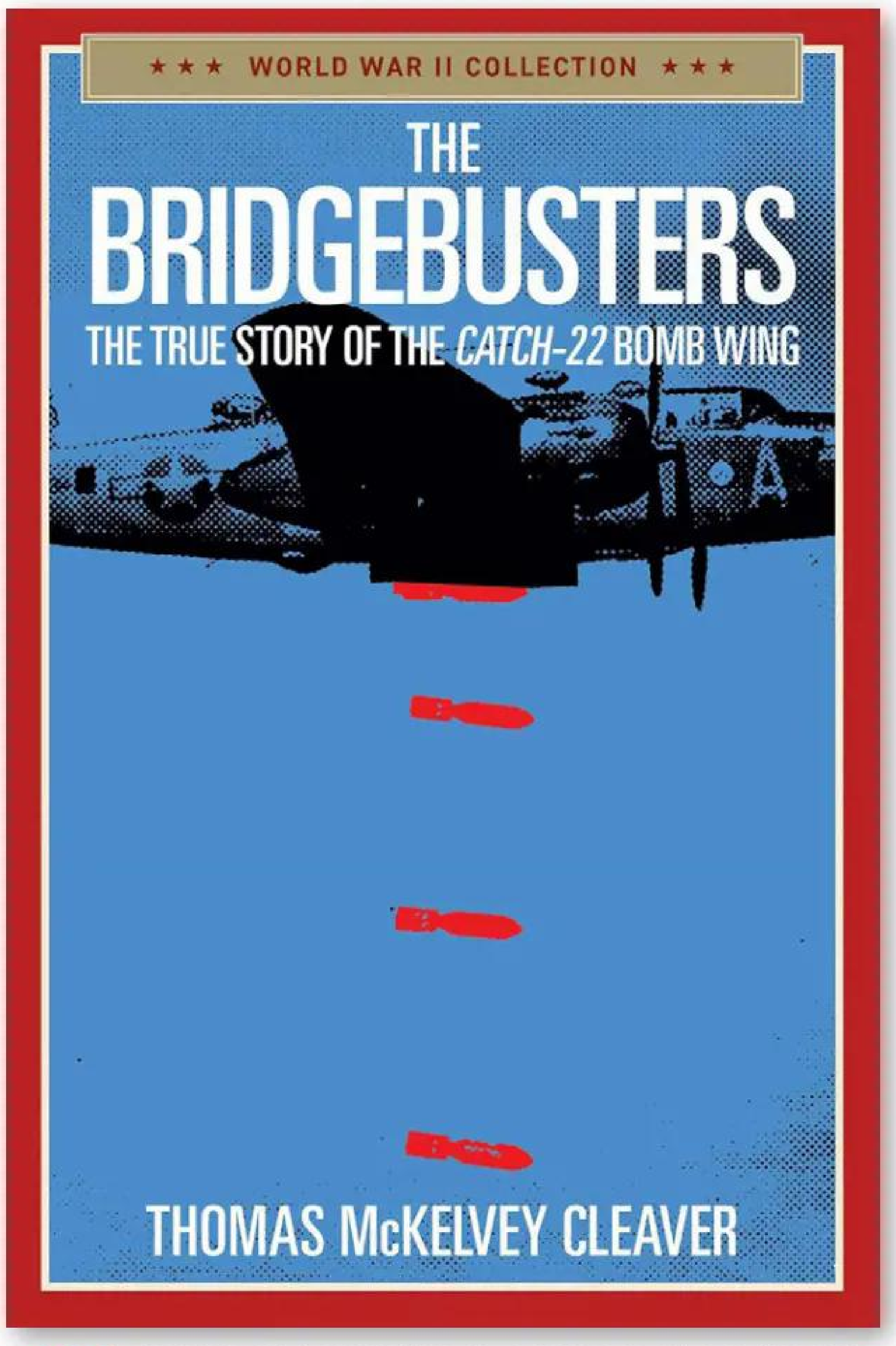
EXTRA DISCOUNT!
BUY OVER $100 AND TAKE OFF AN ***ADDITIONAL 10%***


To Fly and Fight
Memoirs of a Triple Ace
Col. Clarence E. "Bud" Anderson
with Joseph P. Hamelin
Forward by General Chuck Yeager

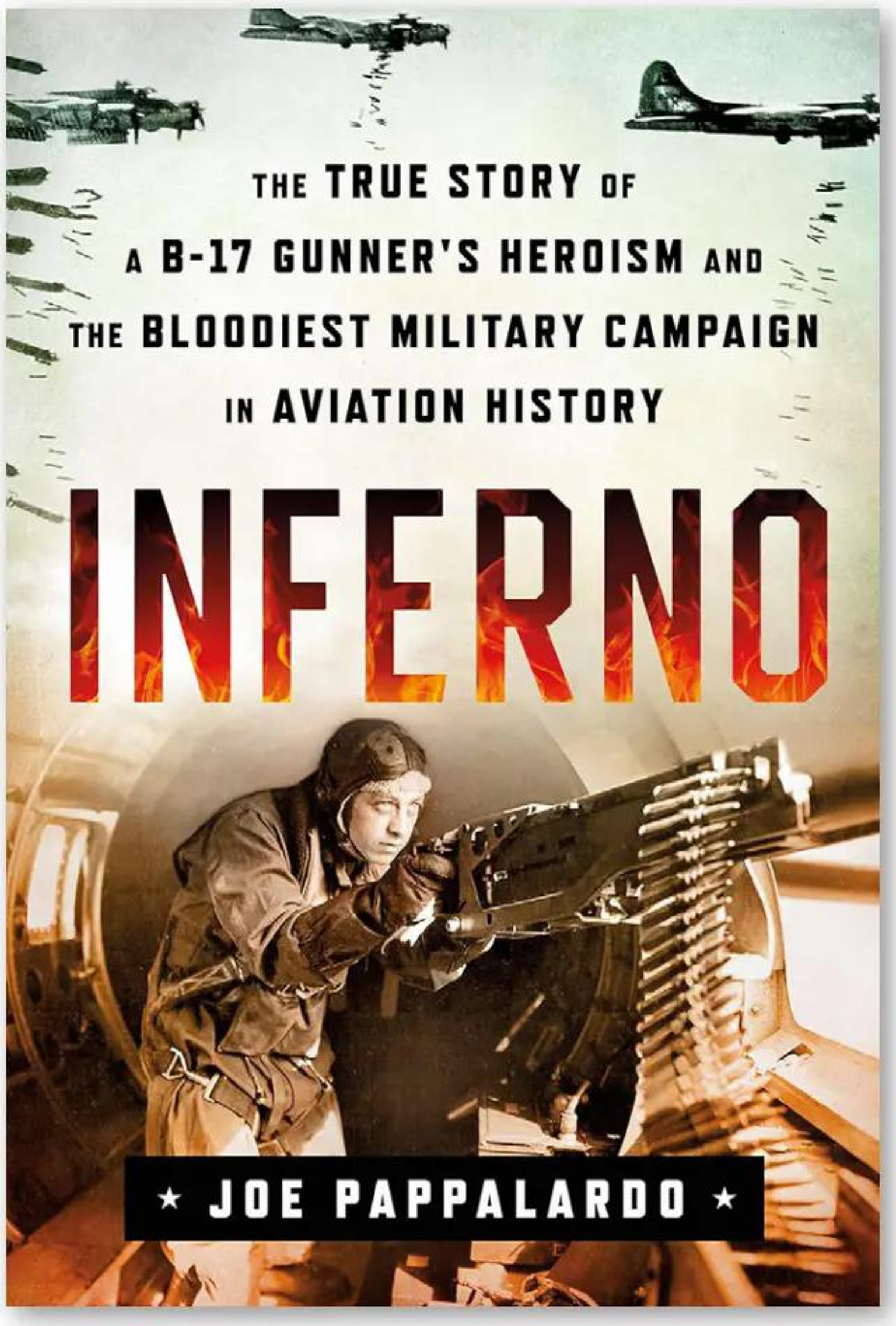
001: TO FLY AND FIGHT
Hardbound, 400 pages.
Triple ace Bud Anderson's amazing story. These are the LAST remaining autographed copies $60


LIGHTNING DOWN
A WORLD WAR II STORY OF SURVIVAL
TOM CLAVIN
NEW YORK TIMES BESTSELLING AUTHOR

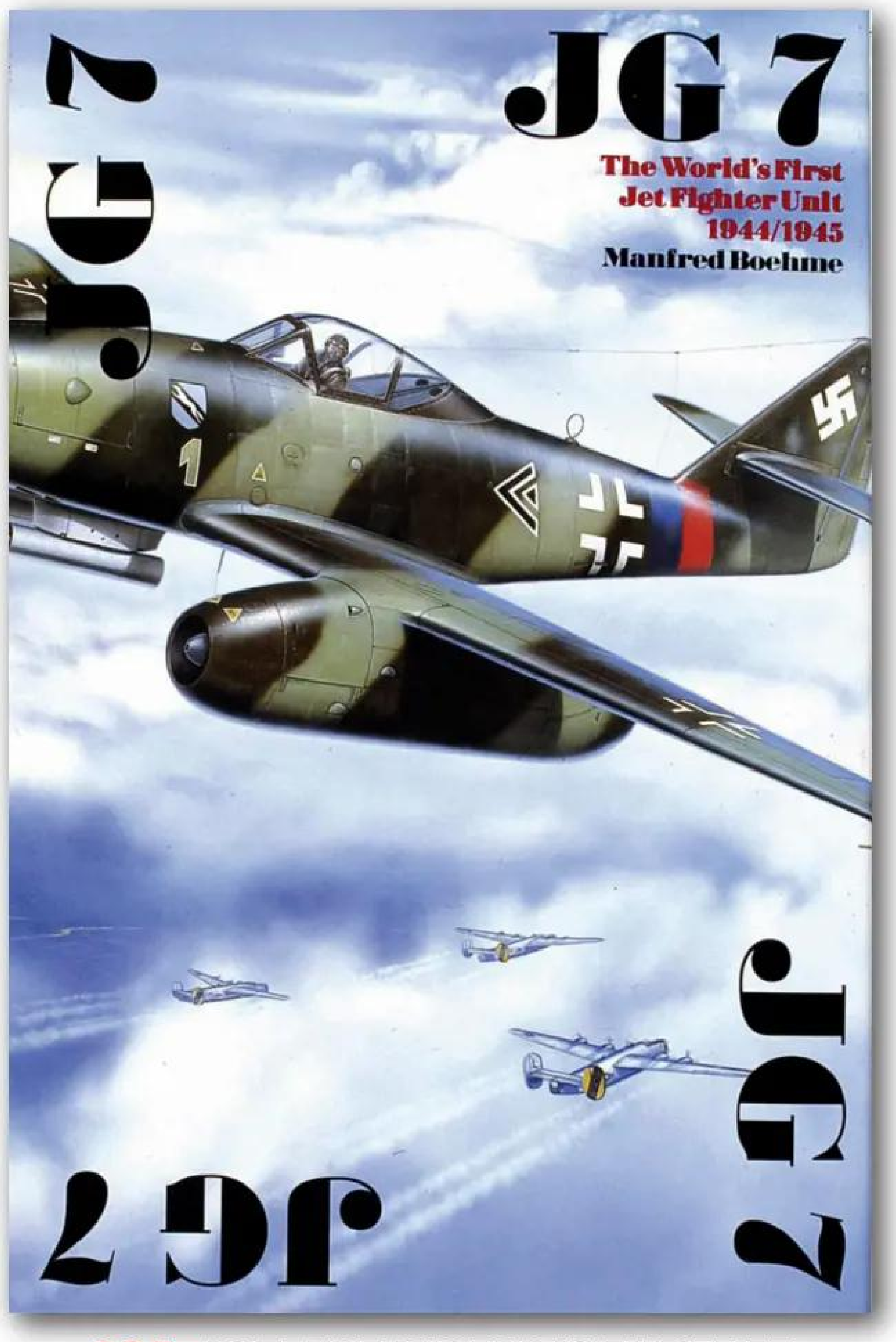
002: LIGHTNING DOWN: A WWII STORY OF STORY OF SURVIVAL by Tom Clavin. Hardbound, 320 Pages. P-38 pilot Joe Moser shot down on his 44th mission over France. Captured, he begins his journey into hell. PUB at $28, NOW $22


★★★ WORLD WAR II COLLECTION ★★★
THE BRIDGEBUSTERS
THE TRUE STORY OF THE CATCH-22 BOMB WING
THOMAS McKELVEY CLEAVER

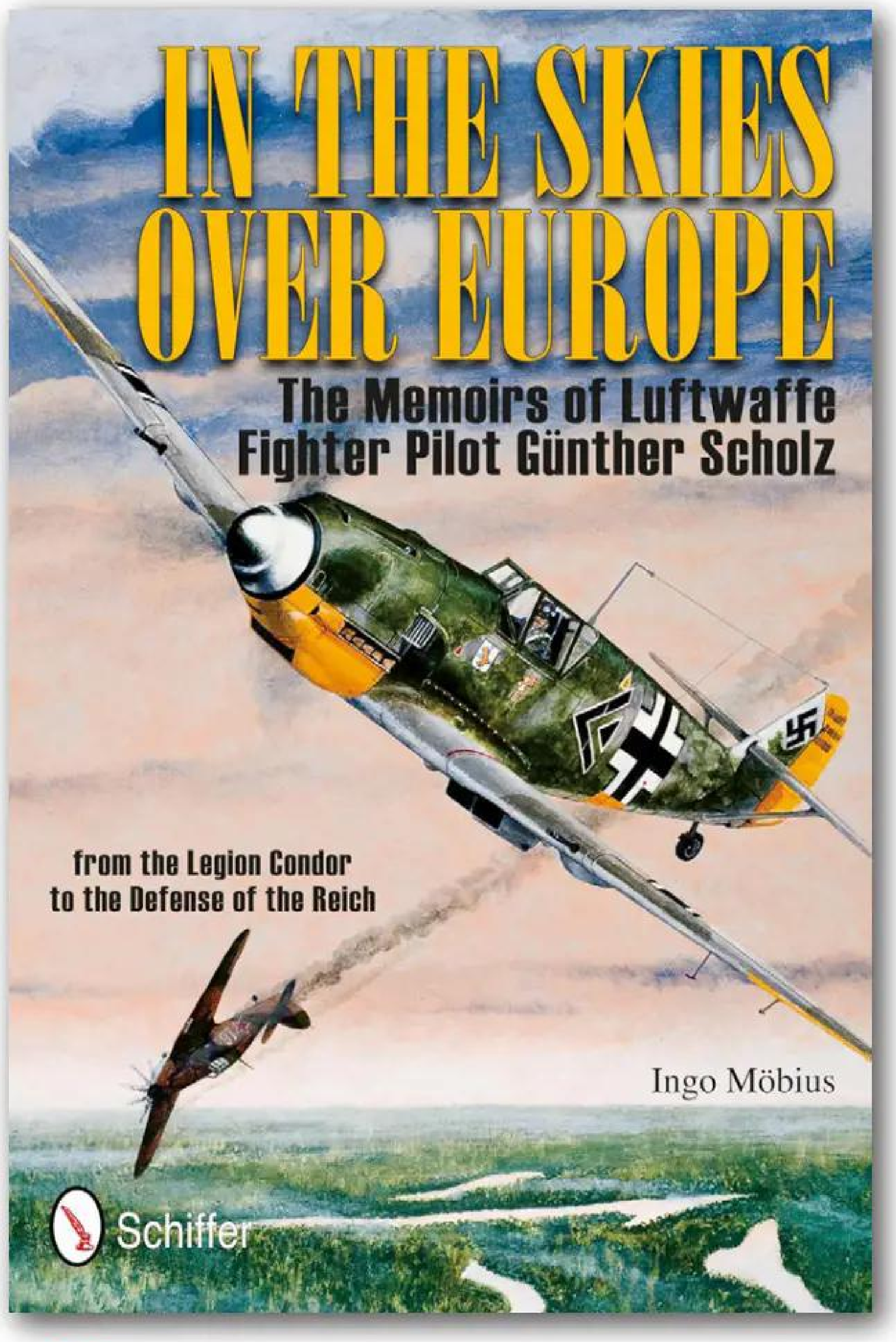
003: BRIDGEBUSTERS: THE TRUE STORY OF CATCH-22 BOMB WING by Thomas McKelvey Cleaver. Softbound, 268 Pages. The true story of Joseph Heller's B-25 unit. PUB at $20, NOW $16


THE TRUE STORY OF A B-17 GUNNER'S HEROISM AND THE BLOODIEST MILITARY CAMPAIGN IN AVIATION HISTORY
INFERNO
★ JOE PAPPALARDO ★

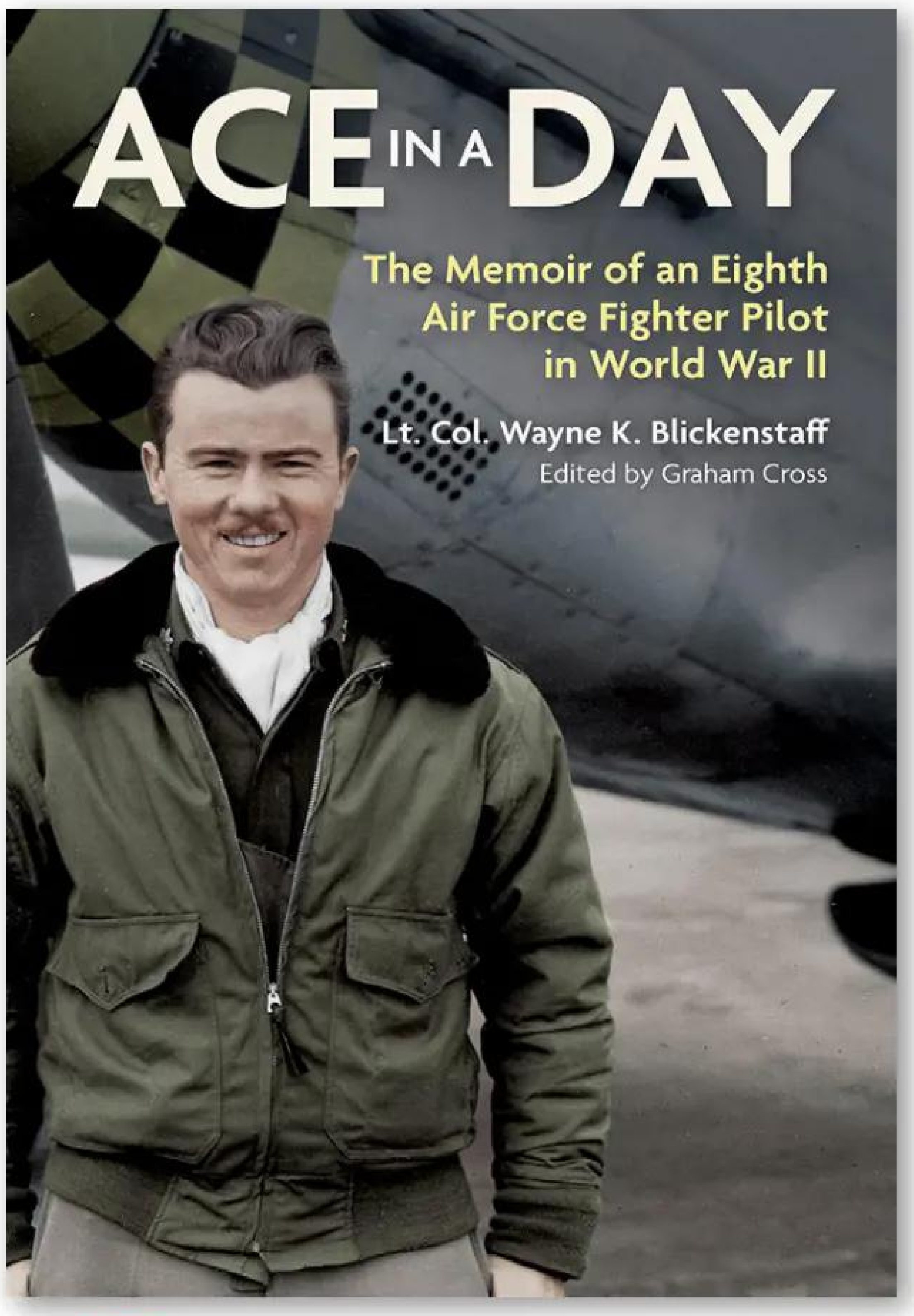
004: INFERNO: TRUE STORY OF A B-17 GUNNER'S HEROISM AND THE BLOODIEST MILITARY CAMPAIGN IN AVIATION HISTORY by Joe Pallalardo. Hardbound, 352 pages. Flying Fortresses in the air war over Germany. PUB at $30, NOW $22


JG 7
The World's First Jet Fighter Unit 1944/1945
Manfred Boehme
JG 7
JG 7
JG 7

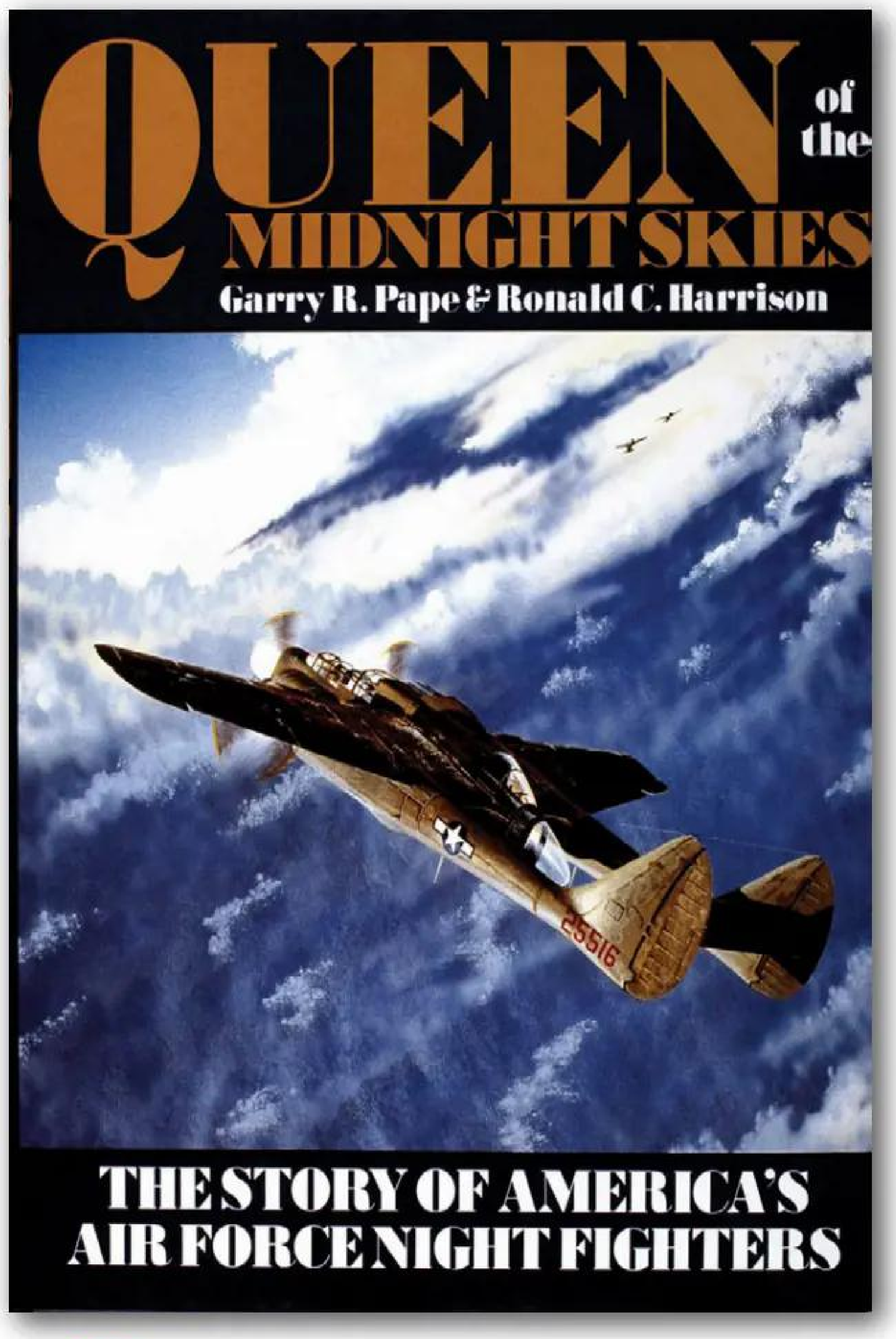
005: **JG7: THE WORLD'S FIRST JET FIGHTER UNIT** by Manfred Boehme. Hardbound, 288 Pages. Daring Me 262 combat in the closing days of WWII. PUB at $35, NOW $29


IN THE SKIES OVER EUROPE
The Memoirs of Luftwaffe Fighter Pilot Günther Scholz
from the Legion Condor to the Defense of the Reich
Ingo Möbius
Schiffer

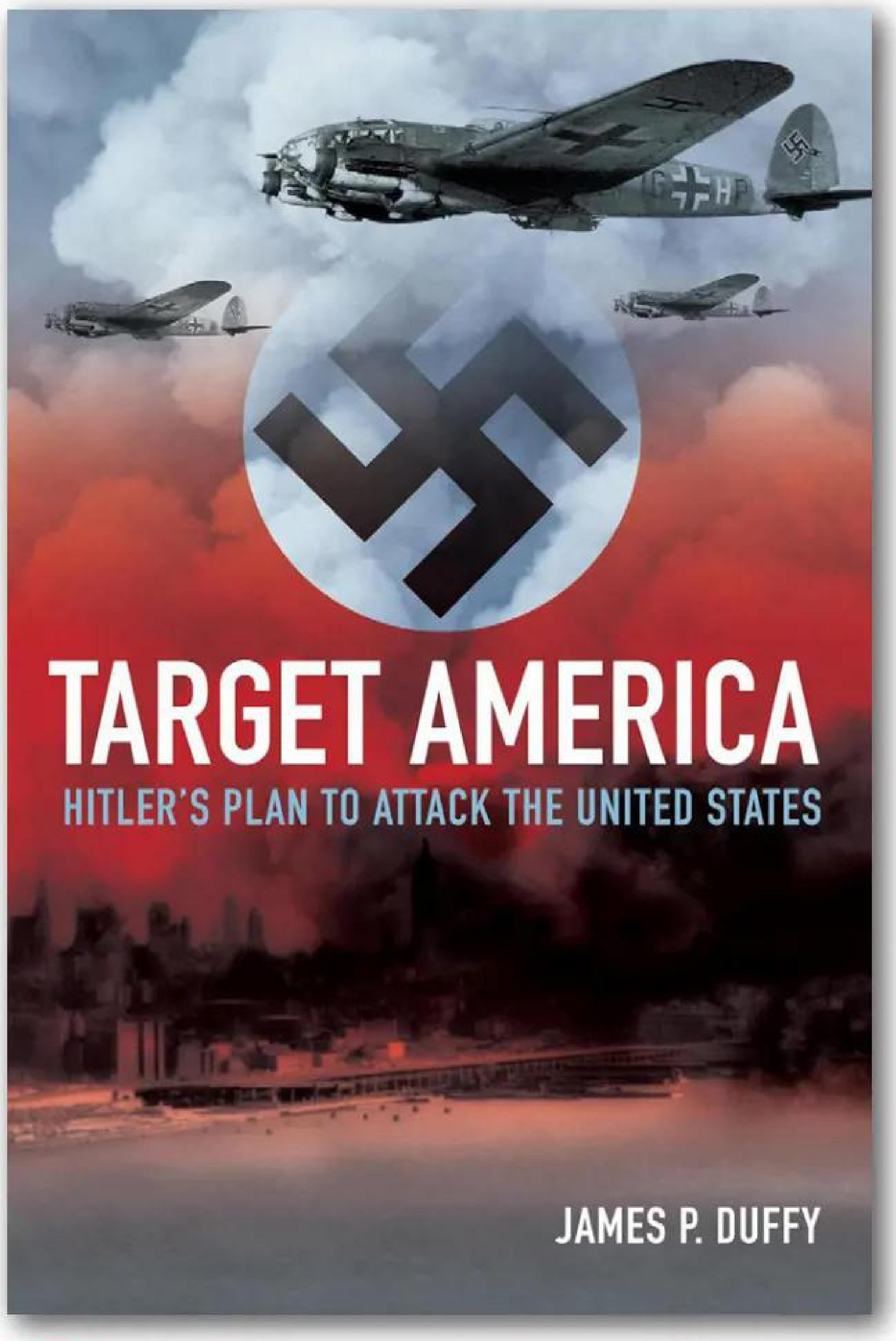
006: **IN THE SKIES OVER EUROPE: MEMOIRS OF A LUFTWAFFE FIGHTER PILOT** by Gunther Scholz. Hardbound, 300 Pages. First-hand combat over Poland, the Battle of Britain and other air campaigns. PUB at $35, NOW $29


ACE IN A DAY
The Memoir of an Eighth Air Force Fighter Pilot in World War II
Lt. Col. Wayne K. Blickenstaff
Edited by Graham Cross

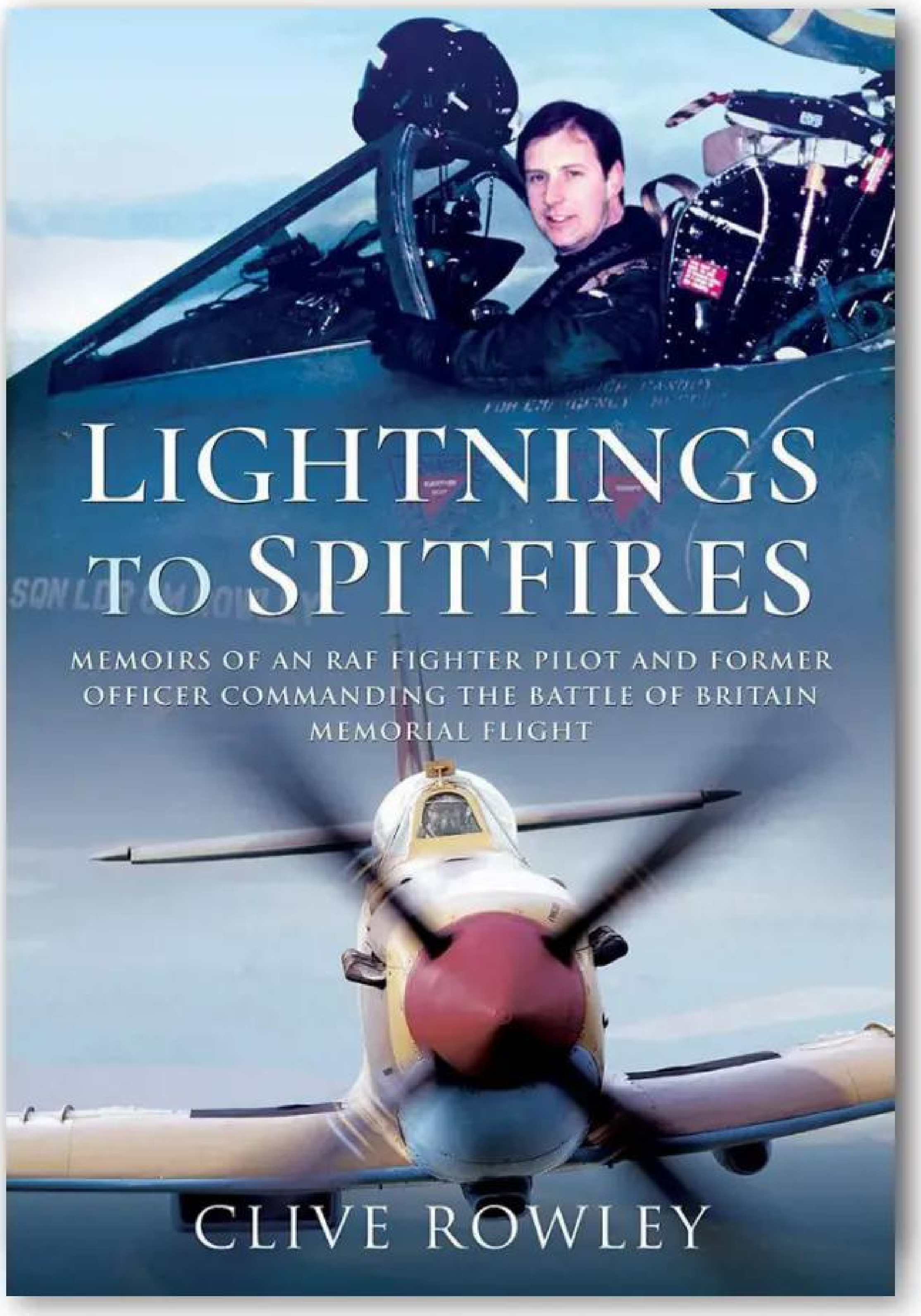
007: **ACE IN A DAY: MEMOIRS OF AN EIGHTH AF FIGHTER PILOT IN WWII** by Lt. Col. Wayne Blickenstaff. Hardbound, 360 Pages. Daring tale of a double ace P-47/P-51 pilot in the skies over Europe. PUB at $40, NOW at $32


QUEEN of the MIDNIGHT SKIES
Garry R. Pape & Ronald C. Harrison
THE STORY OF AMERICA'S AIR FORCE NIGHT FIGHTERS

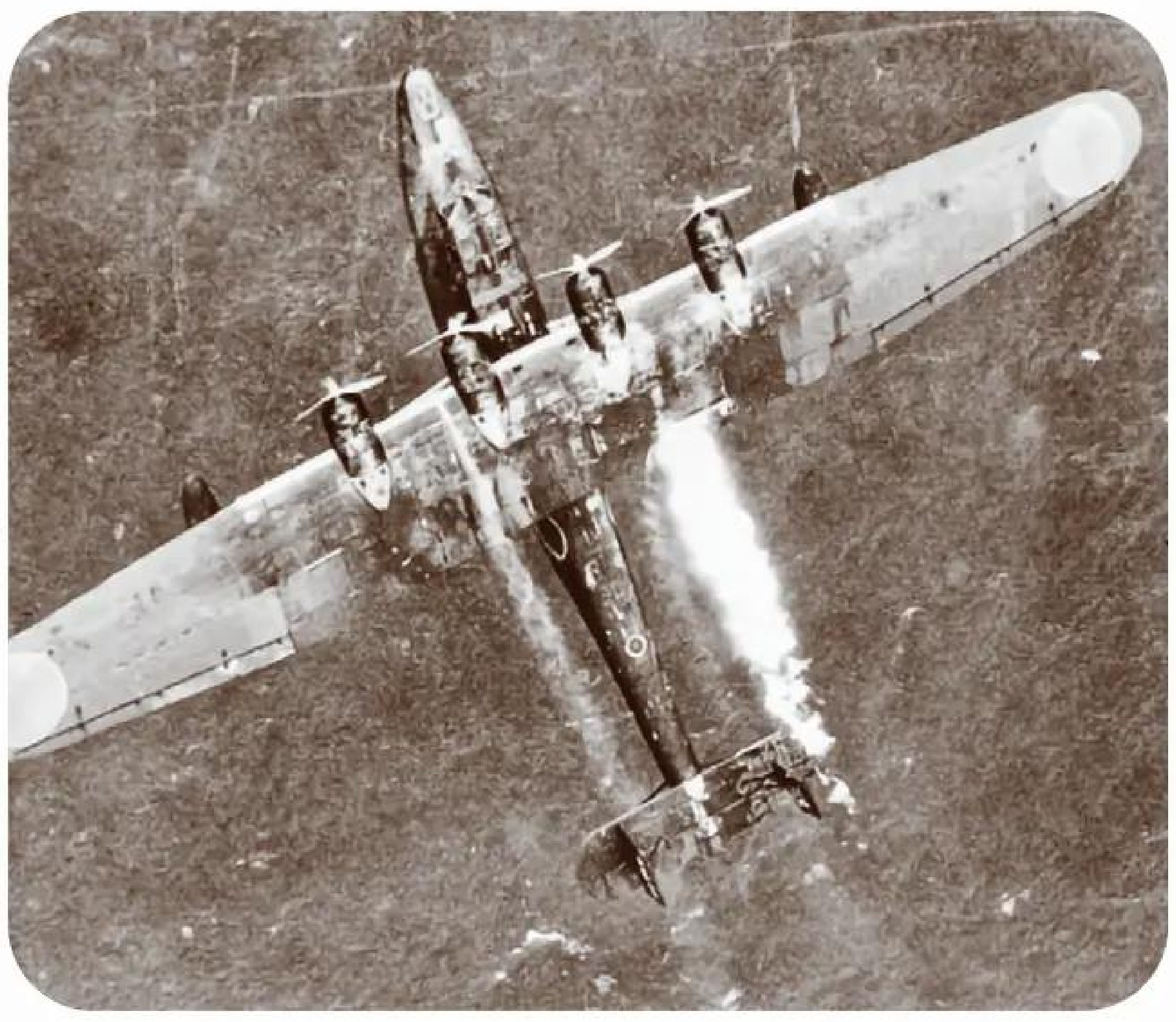
008: **QUEEN OF THE MIDNIGHT SKIES: THE STORY OF AMERICA'S NIGHT FIGHTERS** by Garry Pape. Hardbound, 368 Pages. Complete history of the Northrop P-61 and America's other night-fighters. PUB at $45, NOW $38


TARGET AMERICA
HITLER'S PLAN TO ATTACK THE UNITED STATES
JAMES P. DUFFY

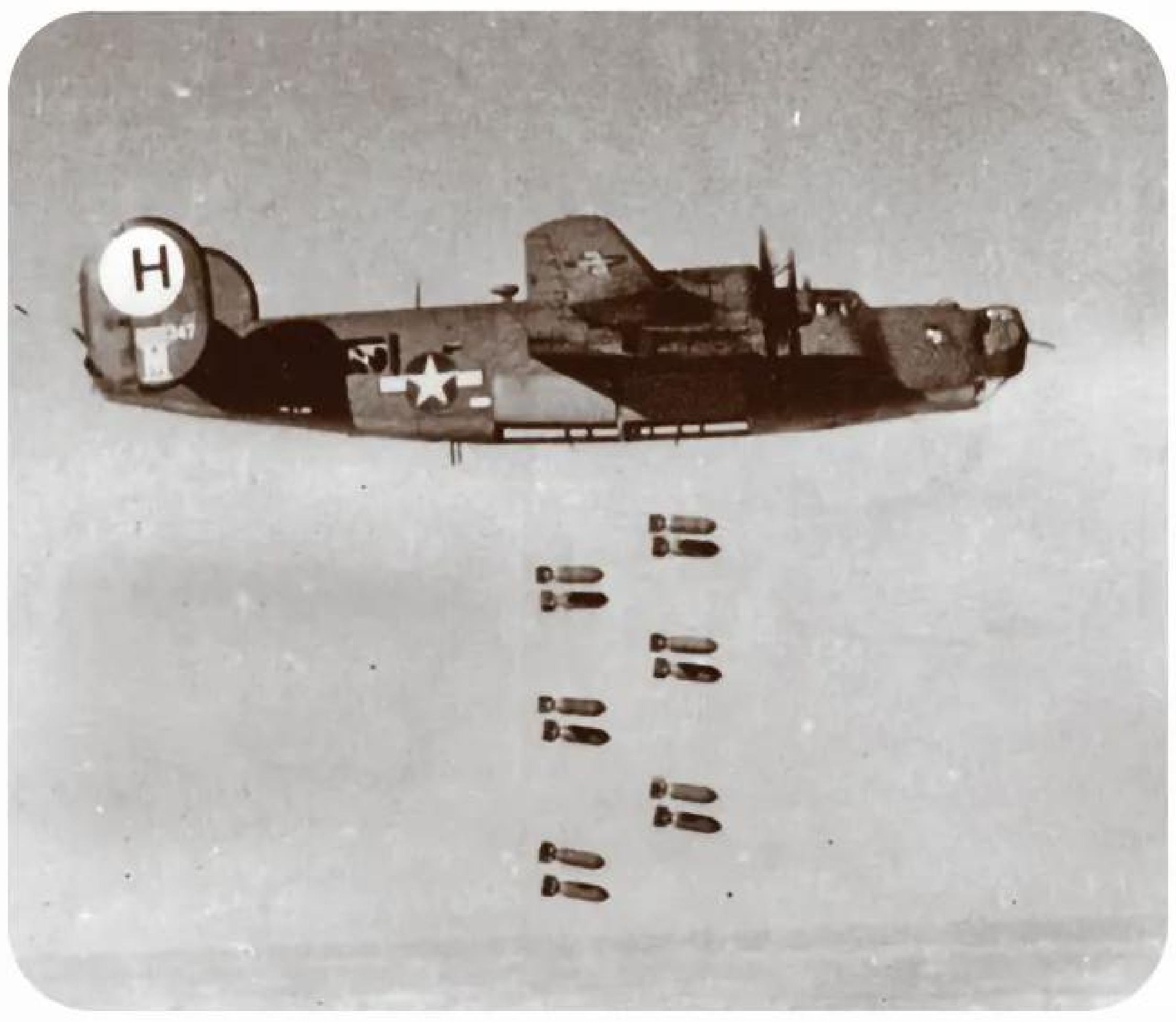
009: **TARGET AMERICA: HITLER'S PLAN TO ATTACK THE UNITED STATES** by James Duffy. Softbound, 178 Pages. Germany's plans for an attack on America's East Coast. PUB at $20, NOW $15

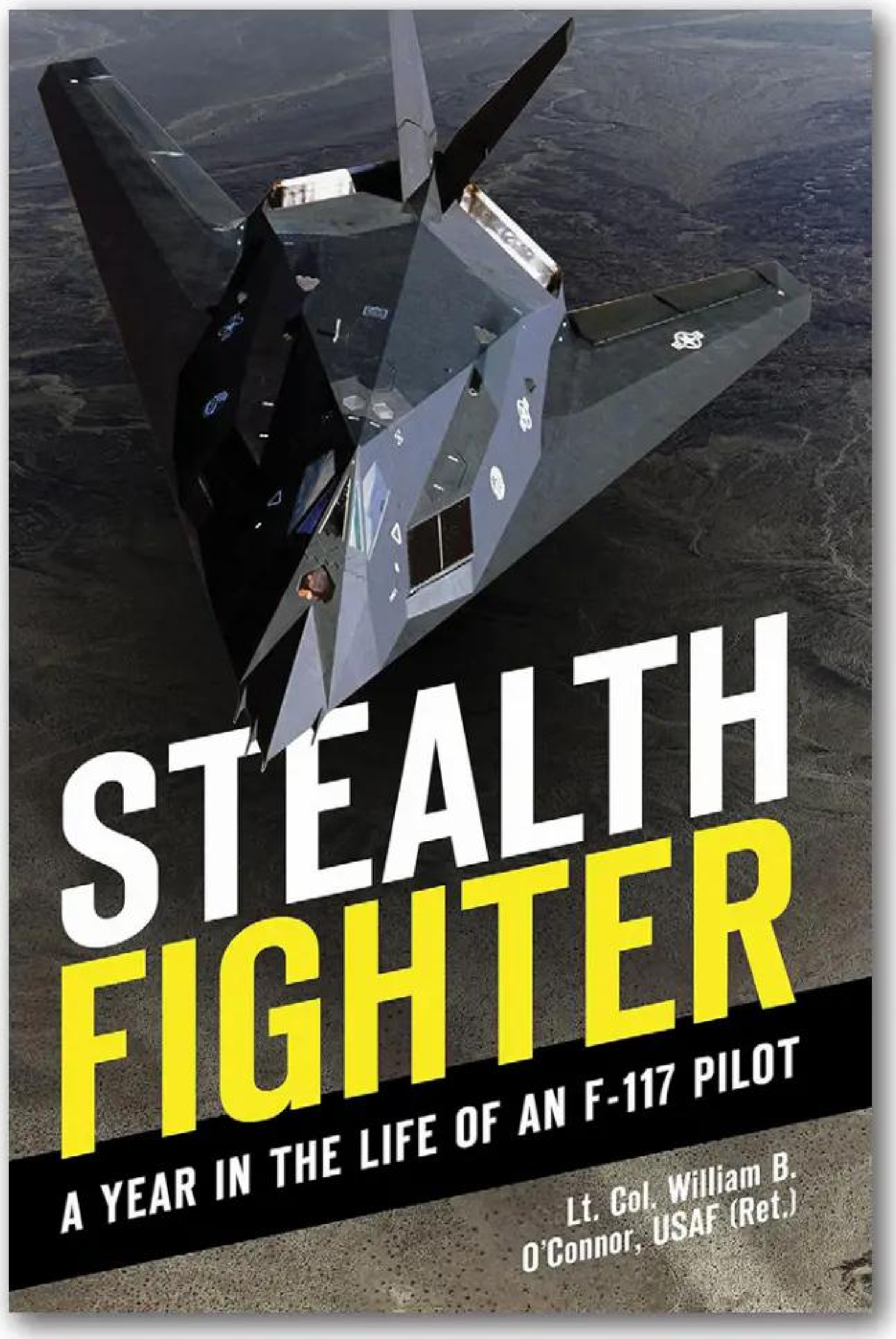

LIGHTNINGS TO SPITFIRES
MEMOIRS OF AN RAF FIGHTER PILOT AND FORMER OFFICER COMMANDING THE BATTLE OF BRITAIN MEMORIAL FLIGHT
CLIVE ROWLEY

010: **LIGHTNINGS TO SPITFIRES: MEMOIRS OF AN RAF FIGHTER PILOT** by Dlive Rowley. Hardbound, 324 Pages. The RAF pilot goes from Mach 2 English Electric Lightnings to commander of the Battle of Britain Memorial Flight. PUB at $50, NOW $42

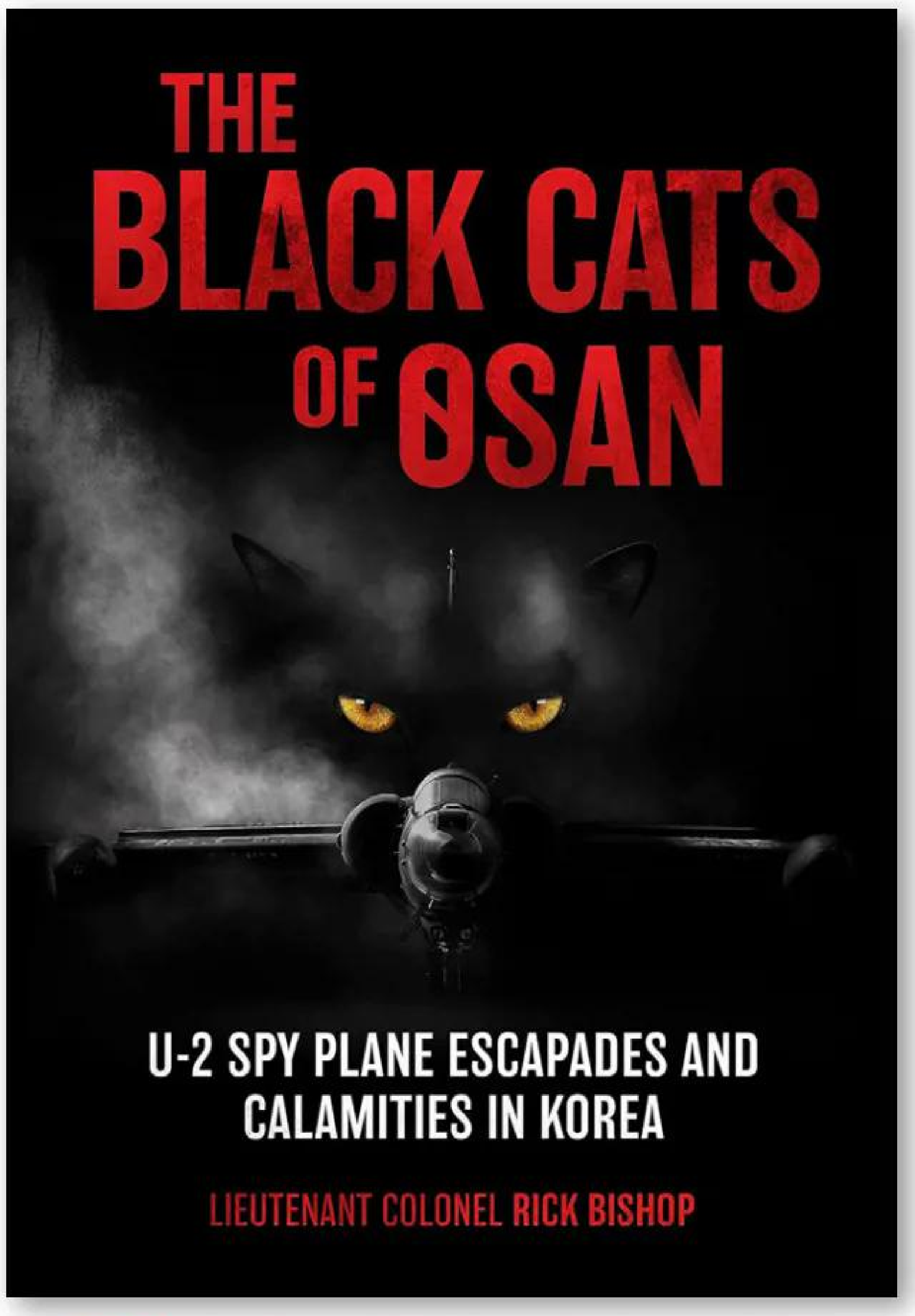


Snoot's Sniper

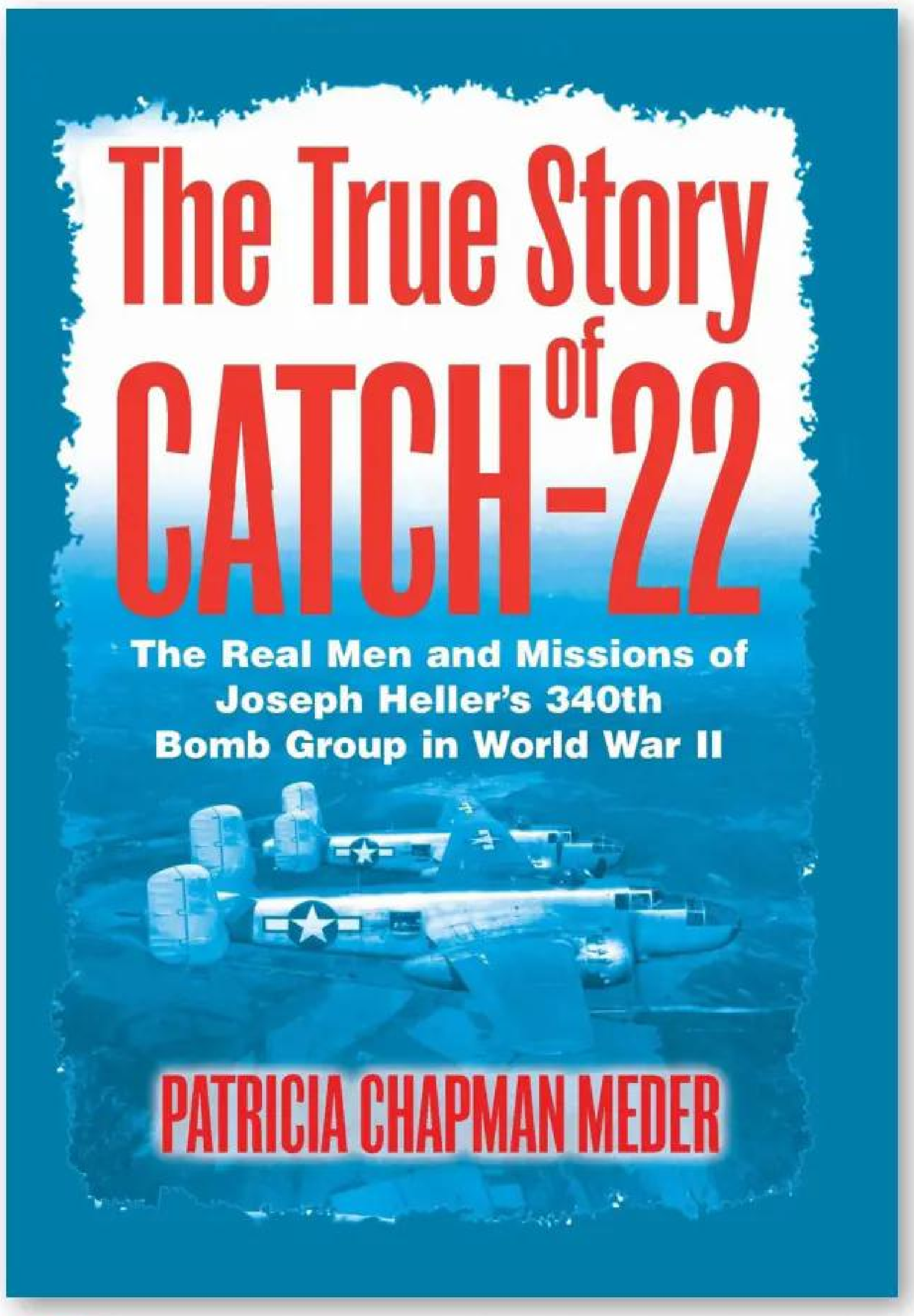



STEALTH
FIGHTER
A YEAR IN THE LIFE OF AN F-117 PILOT
Lt. Col. William B. O'Connor, USAF (Ret.)

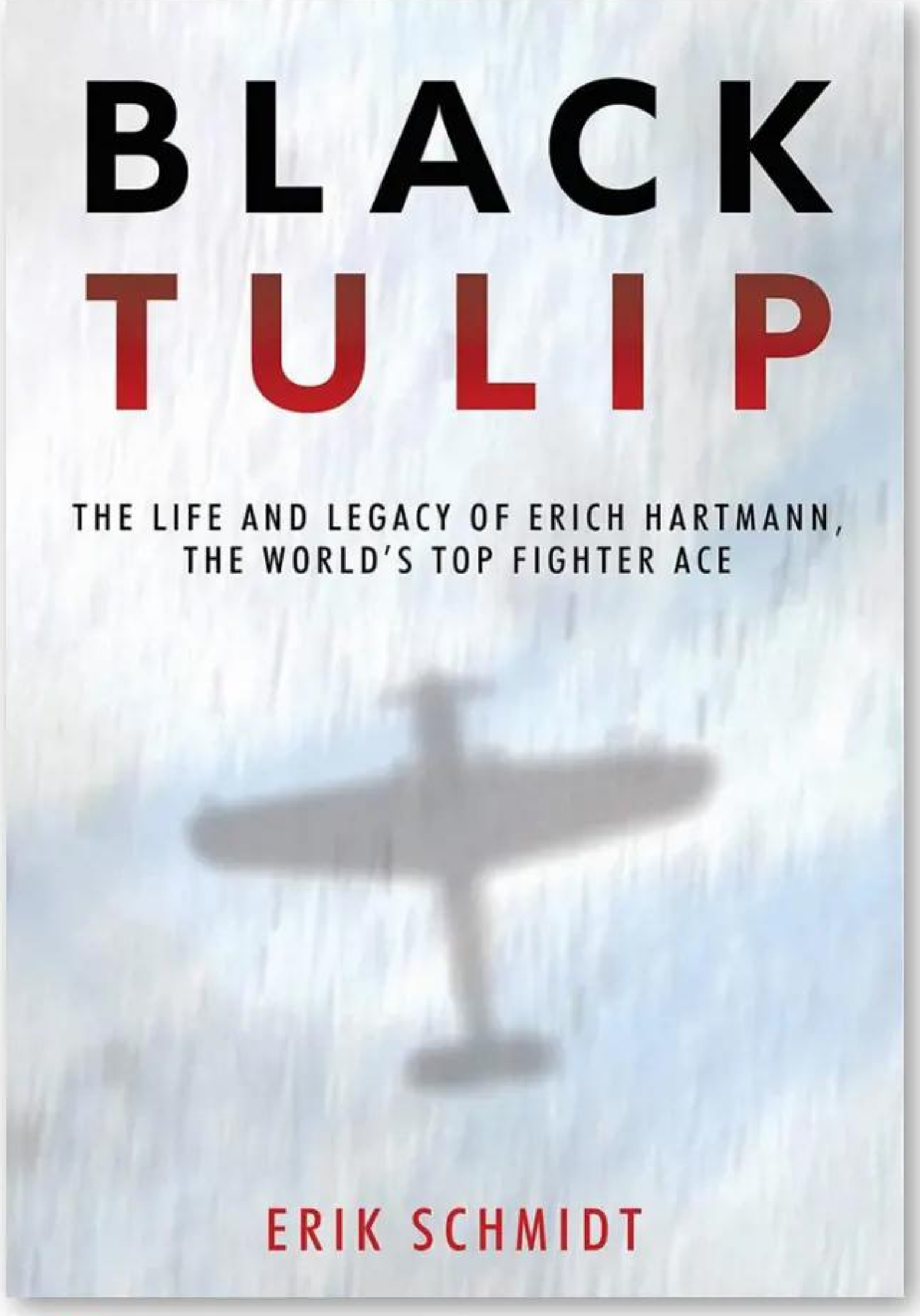
011: STEALTH FIGHTER: A YEAR IN THE LIFE OF AN F-117 PILOT by Lt. Col. William O'Conner. Hardbound, 424 Pages. Fascinating first-hand account of flying a top-secret airplane. PUB at $30, NOW $24


THE
BLACK CATS
OF OSAN
U-2 SPY PLANE ESCAPADES AND CALAMITIES IN KOREA
LIEUTENANT COLONEL RICK BISHOP

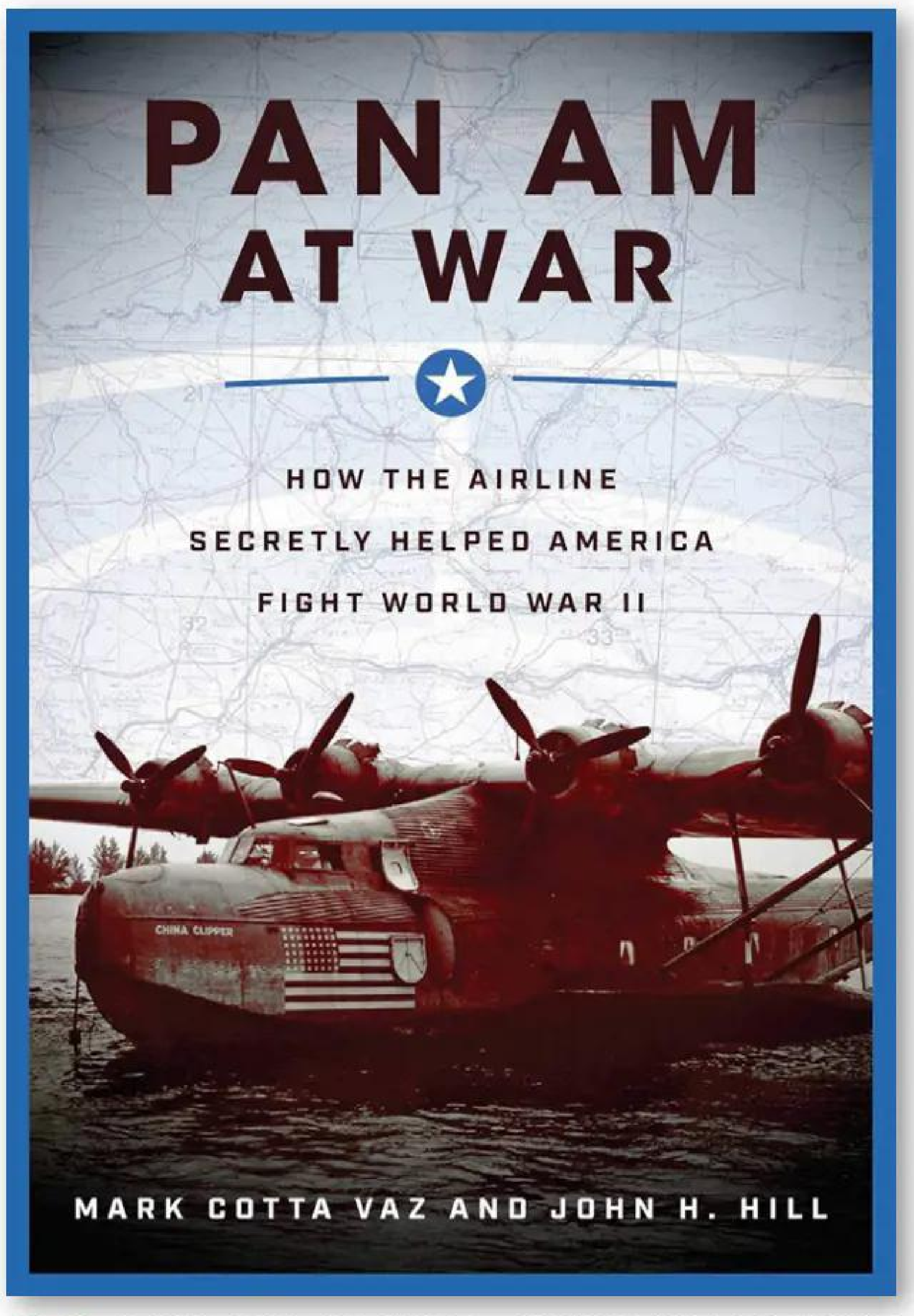
012: BLACK CATS OF OSAN: U-2 SPY PLANE ESCAPADES AND CALAMITIES IN KOREA Lt. Col. Rick Bishop. Get into the cockpit of a Dragon Lady and fly into the missile-filled skies of North Korea. Hardbound, 228 Pages. PUB at $38, NOW $30


The True Story of CATCH-22
The Real Men and Missions of Joseph Heller's 340th Bomb Group in World War II
PATRICIA CHAPMAN MEDER

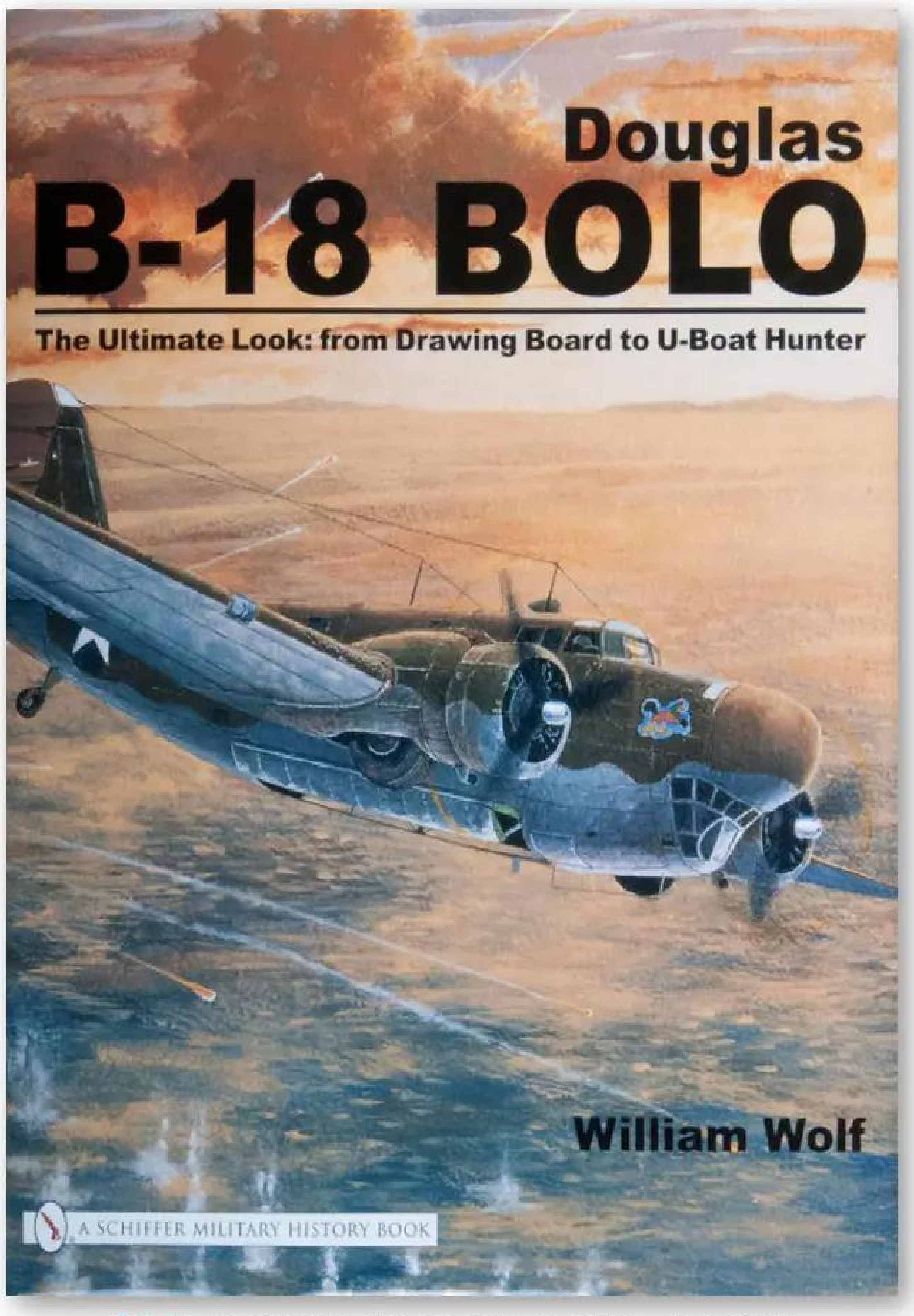
013: TRUE STORY OF CATCH-22: THE REAL MEN AND MISSIONS OF JOSEPH HELLER'S 340th BOMB GROUP IN WWII by Patricia Meder. Paperbound, 239 Pages. More B-25 and a great companion book to Item 003. PUB at $25, NOW $15


BLACK
TULIP
THE LIFE AND LEGACY OF ERICH HARTMANN, THE WORLD'S TOP FIGHTER ACE
ERIK SCHMIDT

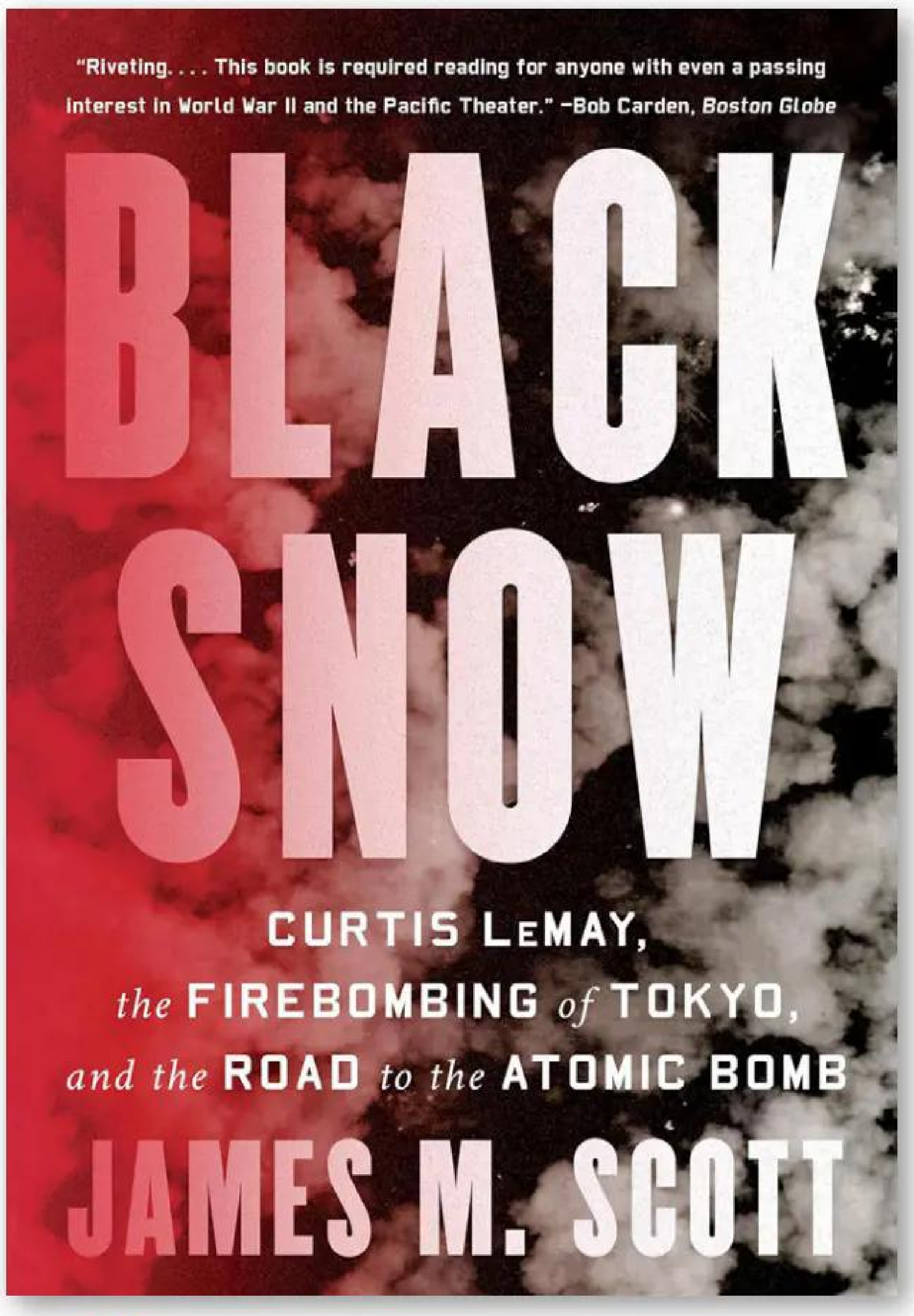
014: BLACK TULIP: THE LIFE AND MYTH OF ERICH HARTMANN, THE WORLD'S TOP FIGHTER ACE by Erik Schmidt. Paperbound, 212 Pages. Inside the life of Germany's great ace. PUB at $20, NOW $14


PAN AM
AT WAR
HOW THE AIRLINE SECRETLY HELPED AMERICA FIGHT WORLD WAR II
MARK COTTA VAZ AND JOHN H. HILL

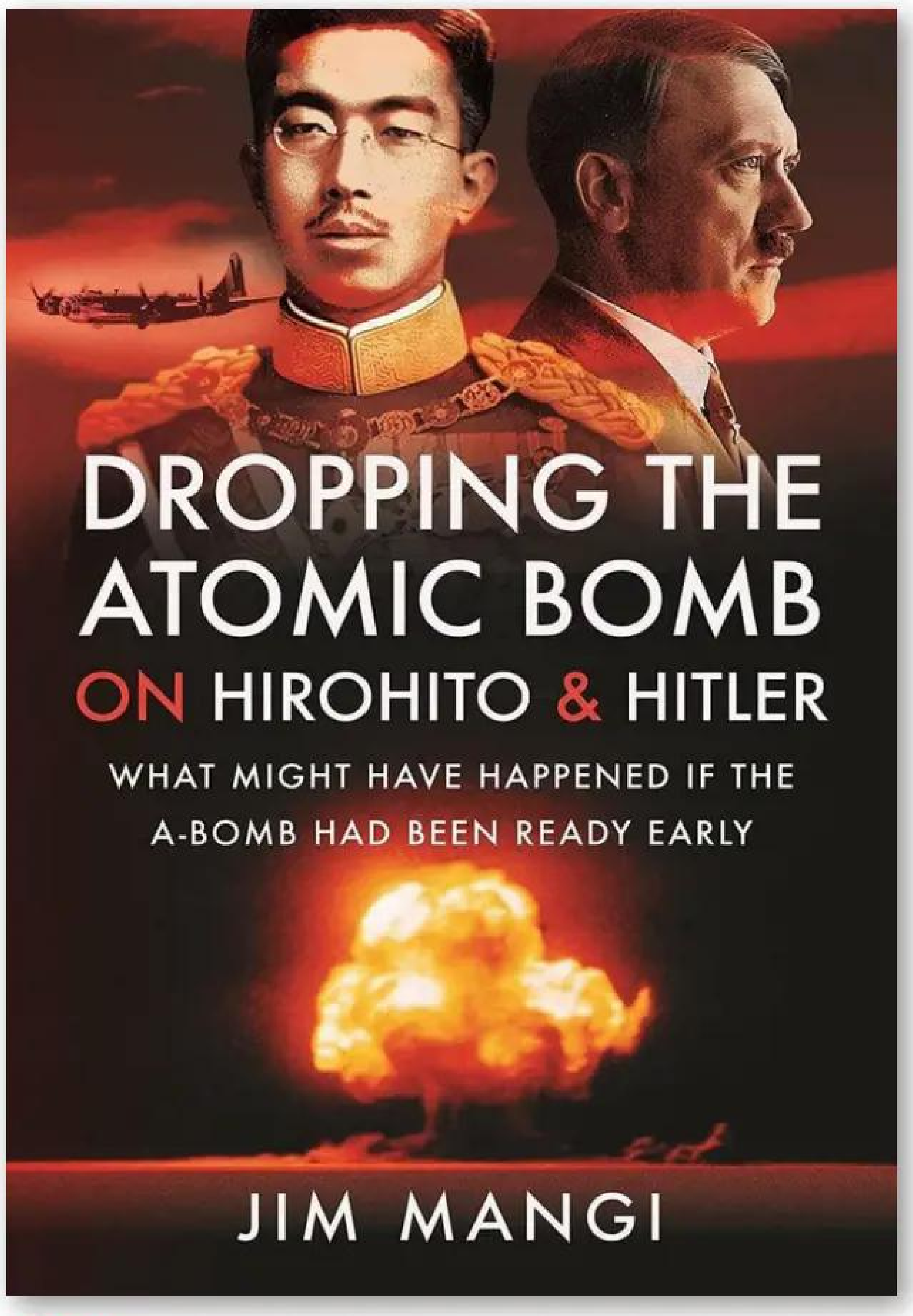
015: PAN AM AT WAR: HOW THE AIRLINE SECRETLY HELPED AMERICA FIGHT WWII by Mark Vaz. Paperbound, 393 Pages. How Pan Am and its crews contributed to America's global war effort. PUB at $23, NOW $16


Douglas
B-18 BOLO
The Ultimate Look: from Drawing Board to U-Boat Hunter
William Wolf
A SCHIFFER MILITARY HISTORY BOOK

016: DOUGLAS B-18 BOLO: FROM DRAWING BOARD TO U-BOAT HUNTER by William Wolf. Hardbound, 216 Pages. Obsolete at the start of WWII, the B-18 would earn its keep hunting Germany's deadly underwater warriors. PUB at $60, NOW $49


"Riveting. . . . This book is required reading for anyone with even a passing interest in World War II and the Pacific Theater." —Bob Carden, *Boston Globe*
BLACK SNOW
CURTIS LEMAY, the FIREBOMBING of TOKYO, and the ROAD to the ATOMIC BOMB
JAMES M. SCOTT

017: BLACK SNOW: CURTIS LEMAY, THE FIREBOMING OF TOKYO, AND THE ROAD TO THE ATOMIC BOMB by James Scott. Hardbound, 420 Pages. Absolutely essential reading on the massive B-29 raids on Japan. PUB at $35, NOW $29


DROPPING THE ATOMIC BOMB ON HIROHITO & HITLER
WHAT MIGHT HAVE HAPPENED IF THE A-BOMB HAD BEEN READY EARLY
JIM MANGI

018: DROPPING THE ATOMIC BOMB ON HIROHITO AND HITLER Jim Mangi. Hardbound, 268 Pages. An overview of what would have happened if the atomic bomb had been ready one year earlier. PUB $43, NOW $35

QUANTITY	TITLE NAME	PRICE EACH	TOTAL DUE
	001 TO FLY AND FIGHT	$60	
	002 LIGHTNING DOWN	$22	
	003 BRIDGEBUSTERS	$16	
	004 INFERNO	$22	
	005 JG7: FIRST JET FIGHTER UNIT	$29	
	006 THE SKIES OVER EUROPE	$29	
	007 ACE IN DAY	$32	
	008 QUEEN OF THE MIDNIGHT SKIES	$38	
	009 TARGET AMERICA	$15	
	010 LIGHTNINGS TO SPITFIRES	$42	
	011 STEALTH FIGHTER	$24	
	012 BLACK CATS OF OSAN	$30	
	013 TRUE STORY OF CATCH-22	$19	
	014 BLACK TULIP	$14	
	015 PAN AM AT WAR	$16	
	016 DOUGLAS B-18 BOLO	$49	
	017 BLACK SNOW	$29	
	018 DROPPING THE ATOMIC BOMB	$35	
	ORDER OVER $100 AND TAKE OFF AN ADDITIONAL 10%!		

(Domestic Postage is included in the purchase price. Canadian and foreign orders please call 1-818-700-6868 or email *ed@challengeweb.com* for additional postage cost by title.)

DEDUCT DISCOUNT
MERCHANDISE TOTAL
CA Residents add 9% Sales Tax
TOTAL DUE (U.S. Funds Only)

CALL 818-700-6868 FOR IMMEDIATE SERVICE!

Name ____________________
Address ____________________
City ____________________ State________ Zip + 4 ________
Telephone Number (in the event we need to contact you): ____________________
E-mail address: ____________________

EXTRA DISCOUNT!

BUY OVER $100 AND TAKE OFF AN ***ADDITIONAL 10%***

Challenge AVIATION BOOK CLUB

Payment Enclosed (Orders must be prepaid in U.S. funds)

○Check ○Money Order ○Credit Card

Card # ____________________
CVV # ____________________
Expiration Date ____________________
Signature____________________

SEND TO:

CHALLENGE ABC
9800-D Topanga Canyon Blvd. #368
Chatsworth, CA 91311

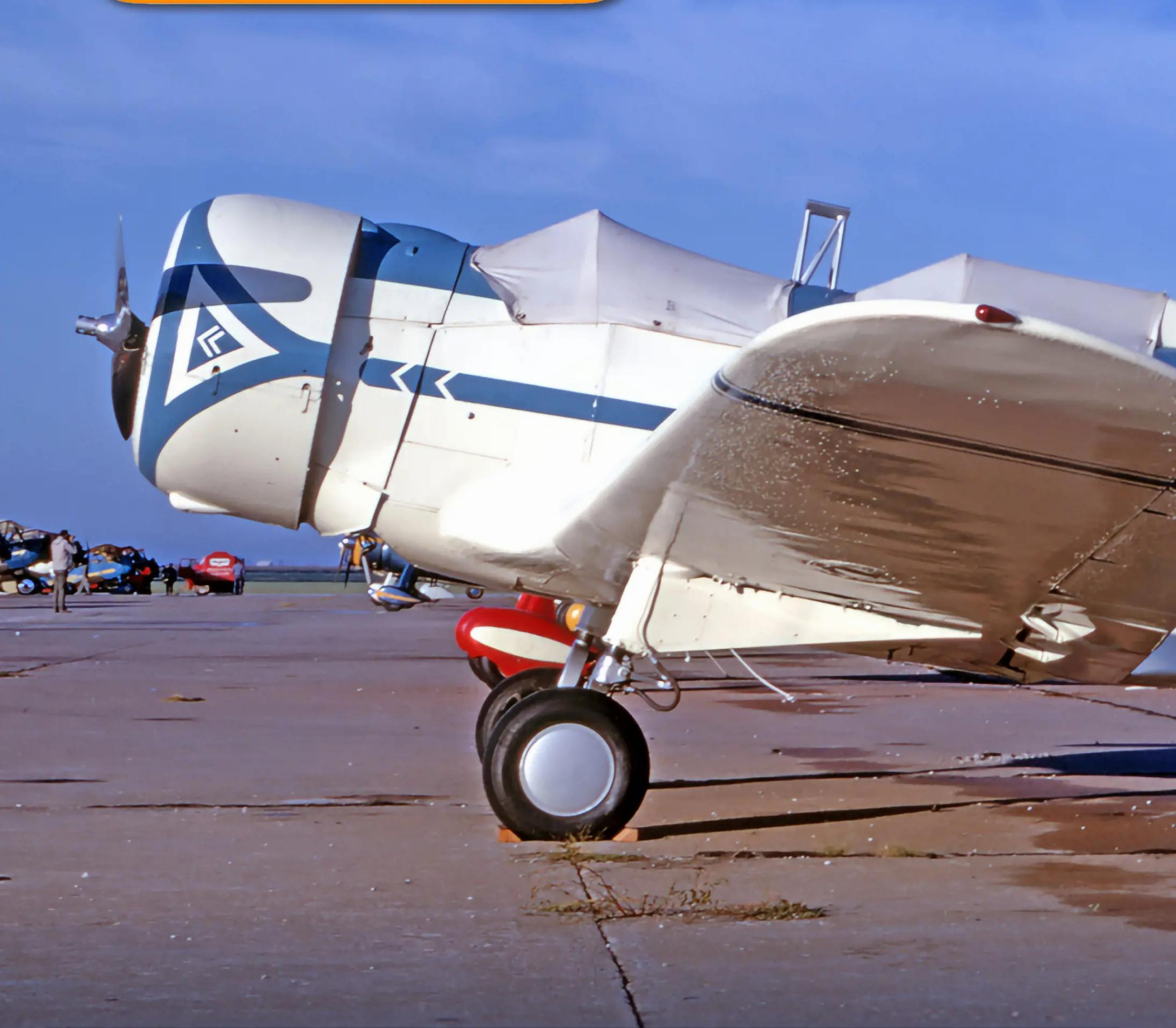
OR, ORDER AT:

1-818-700-6868

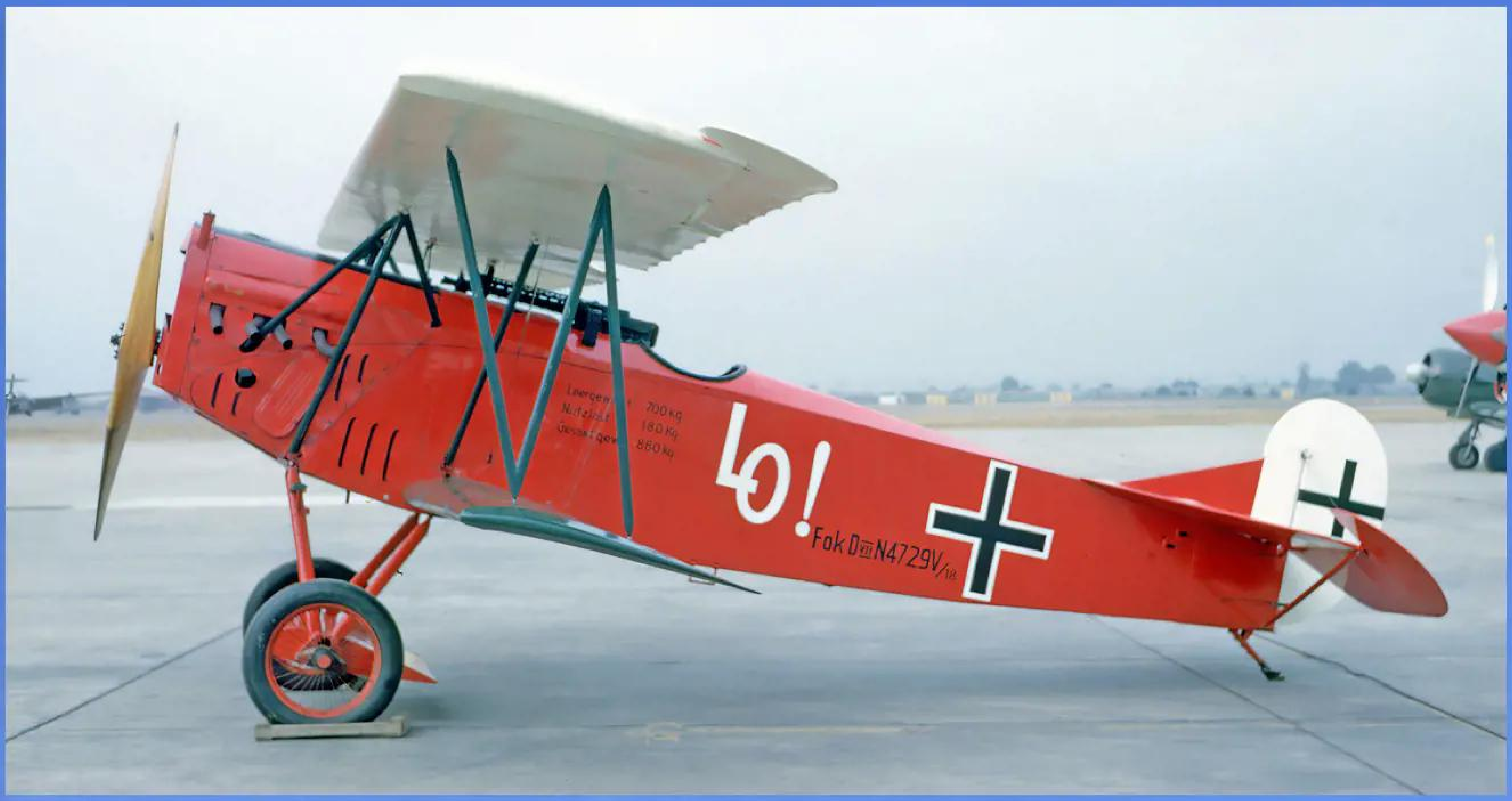
FRIDAY NIGHT OLDIES

BY DOUG FISHER

SURPLUS EX-MILITARY AIRCRAFT LONG BEFORE THEY BECAME MULTI-MILLION DOLLAR RESTORATIONS

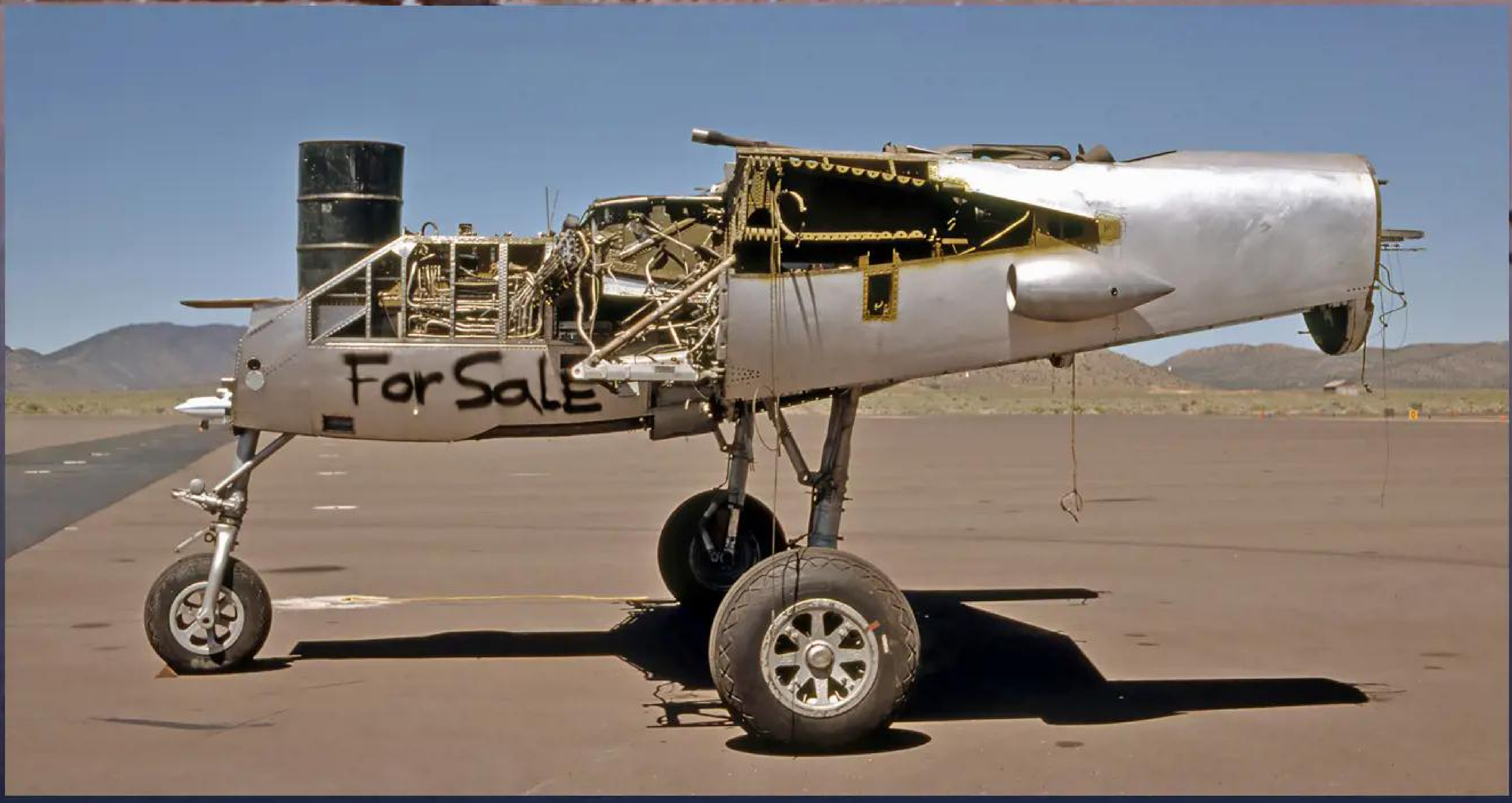


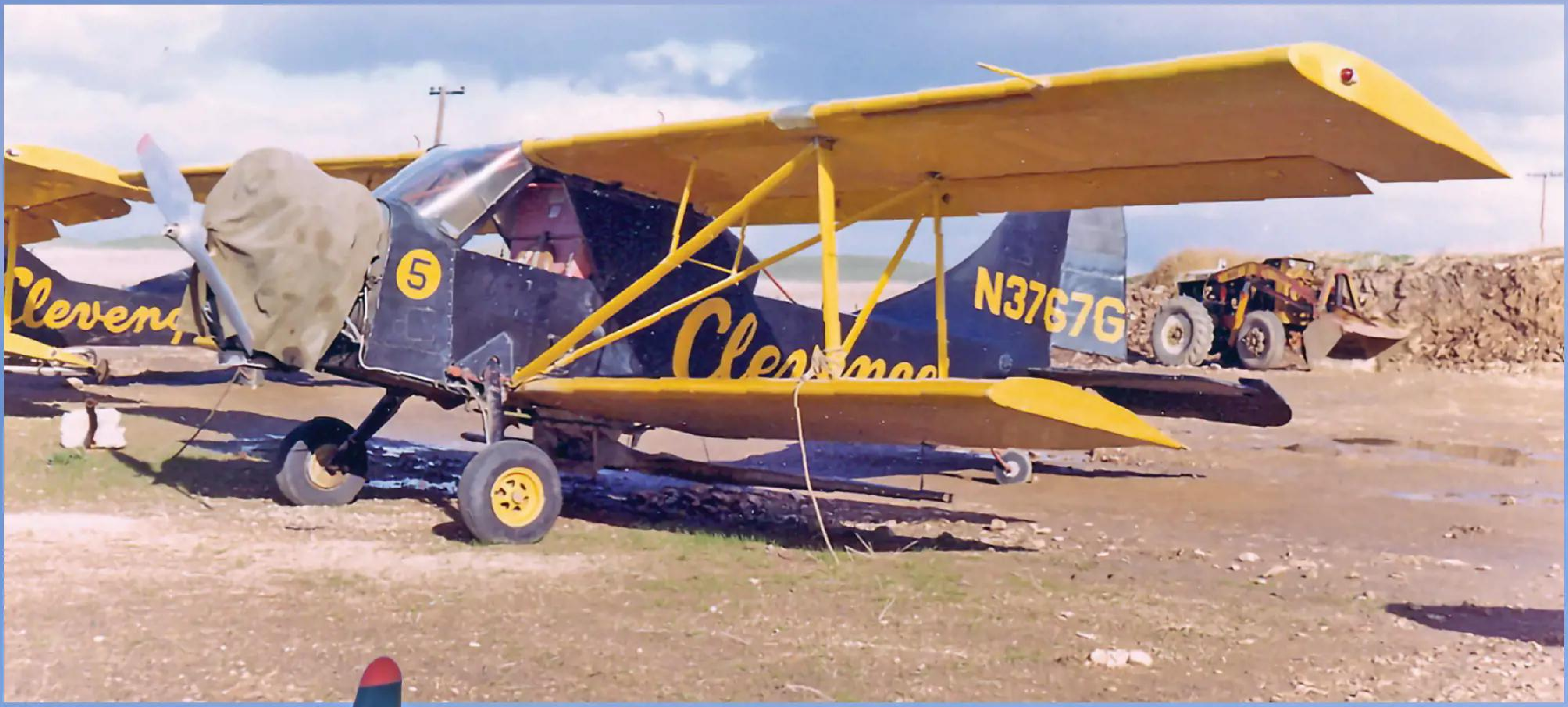
The owner of Fairchild PT-23 N2300M obviously liked his aircraft and lavished a lot of care on the radial-engine trainer. As can be seen, a cowl was added for the Continental R-670 while interesting fairings were placed behind the main landing gear legs. However, all that came to an end on 2 July 1980 near Plano, Texas. The pilot, age 37, had commercial/instrument ratings with a bit over 3000 hours total time and 75 in type when he decided to go flying from Dallas North Airport (a small strip that was, like so many others in the DFW area, bulldozed in the early 1990s for redevelopment). He had not flown the aircraft in over a year and the day was blazing hot with a temperature of 107F. The Fairchild PT series has never been what one could call overpowered but the pilot elected to go aloft in the heat. The takeoff was normal but climb was noted as sluggish. After gaining some altitude, N2300M stalled and then spun. The pilot could not recover before impacting the ground and he died in the crash. The probable cause for the accident was placed squarely on the pilot with the accident report stating that he “failed to obtain/maintain flying speed.”



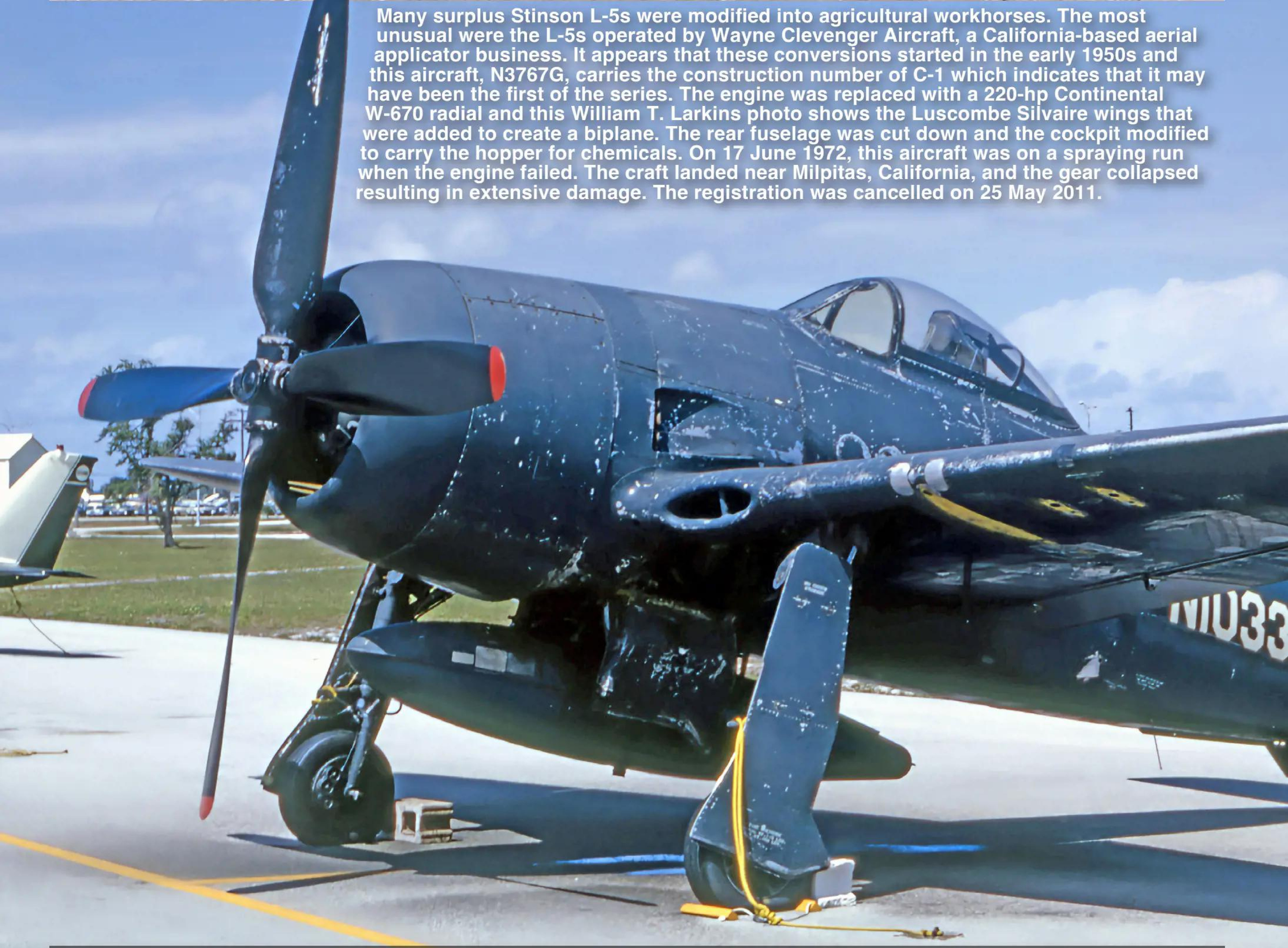
Back in the early 1960s, Frank Tallman would take rare aircraft from the Tallmantz collection at Orange County Airport to airshows in southern California. One such aircraft was the veteran film star Fokker D.VII N4729V. Obtained by Paul Mantz, the Fokker was based for several years in the late 1930s at Burbank, California, and could be rented by the hour to qualified pilots. One of those was regular *Air Classics* contributor B.C. Reed who took the plane up for several flights back when it carried advertising for the new movie *Men With Wings* painted down the sides of the fuselage. Imagine being able to rent and fly an original WWI fighter for just a few dollars today! When Mantz moved his collection to Orange County Airport and merged with Frank Tallman, one of the world's most eclectic gatherings of vintage aircraft could be viewed by the public at the new Movieland of the Air. The original Fokker was one of the stars of the collection but it was rarely flown. Tallmantz could field an amazing array of original Great War aircraft including the D.VII, a Pfalz, Nieuport 28 (now with the American Heritage Museum), SPAD, Standard J-1, Farman, and several non-flying aircraft including the Thomas-Morse S-4C. This unique collection was partially broken up in the auction held after Mantz' death while flying for the film *Flight of the Phoenix*. The D.VII went through several owners and is now beautifully restored and on display the Military Aviation Museum in The Netherlands.

We would certainly like to find this treasure tied-down on our local airport ramp with "For Sale" sprayed on its fuselage pod. We could not initially identify this relic so we turned to Lightning expert Steve Hinton. After examining the photograph Steve commented, "The photo was definitely taken on the ramp at Reno Stead Airport and this means it was the Lightning that had been acquired by the Harrah Collection and flown to Reno from Santa Barbara by Mira Slovak as N505MH in 1967. After Bill Harrah's passing, the aircraft collection was sold and the P-38 project went to Frank Taylor around 1982. It was then acquired by David Tallichet and restored back to flying condition."

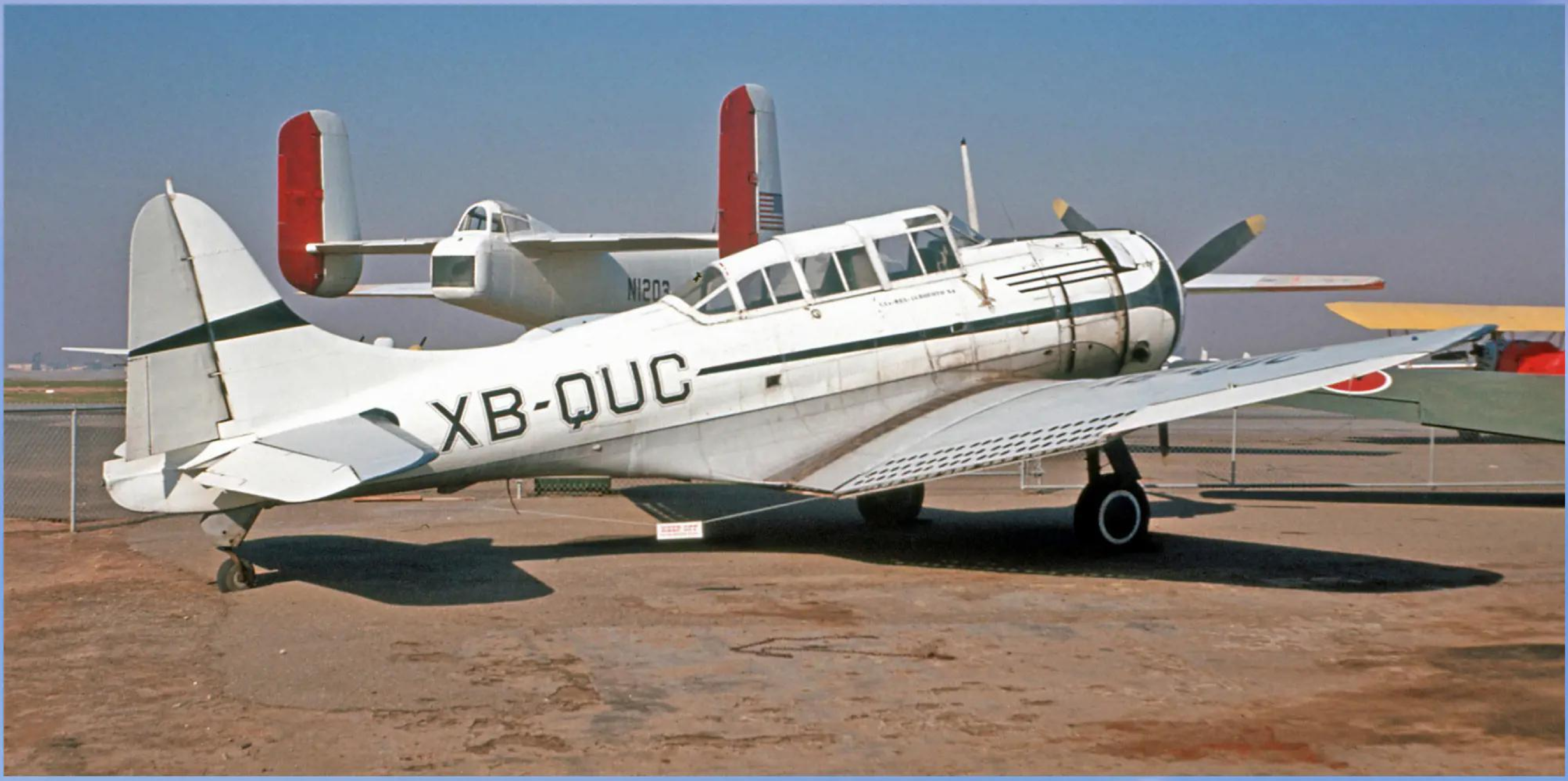




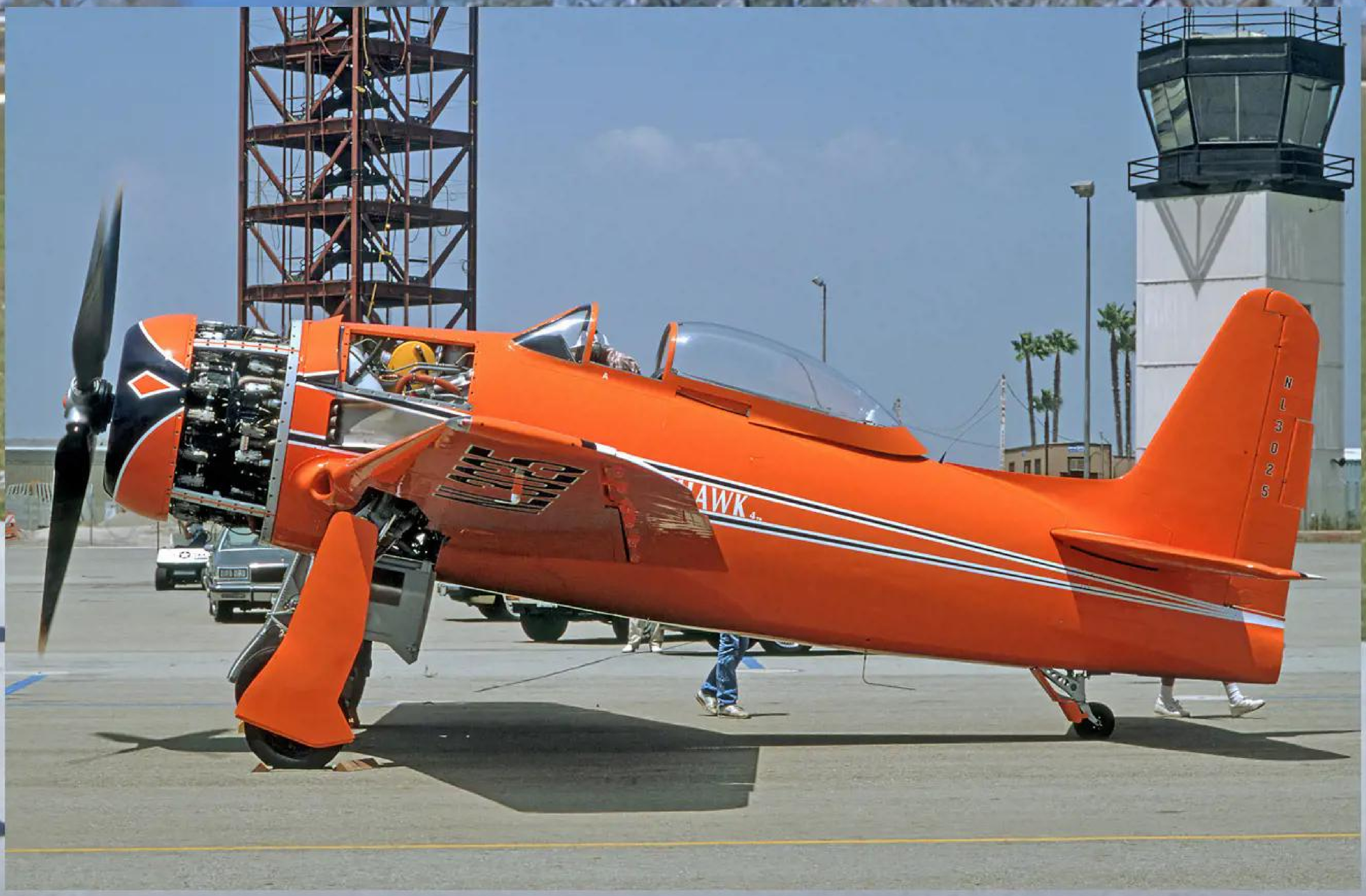
Many surplus Stinson L-5s were modified into agricultural workhorses. The most unusual were the L-5s operated by Wayne Clevenger Aircraft, a California-based aerial applicator business. It appears that these conversions started in the early 1950s and this aircraft, N3767G, carries the construction number of C-1 which indicates that it may have been the first of the series. The engine was replaced with a 220-hp Continental W-670 radial and this William T. Larkins photo shows the Luscombe Silvaire wings that were added to create a biplane. The rear fuselage was cut down and the cockpit modified to carry the hopper for chemicals. On 17 June 1972, this aircraft was on a spraying run when the engine failed. The craft landed near Milpitas, California, and the gear collapsed resulting in extensive damage. The registration was cancelled on 25 May 2011.



During the 1950s, the US Navy got rid of its remaining Bearcats at a series of auctions. Unfortunately, very few people wanted what many considered to be the ultimate propeller-driven fighter and even though the price was usually around $1500, the majority were sold to scrappers. One Bearcat that escaped was F8F-2 BuNo 122637 when it was purchased by William Johnson, registered as N1033B, and flown to his base in Florida. As can be seen, the plane retained what was left of its once Glossy Sea Blue camouflage and the military markings were neatly painted over. At the time, the Bearcat had less value than a comparable civil P-51D Mustang and this was probably due to the fact that the Mustang could be easily modified to carry a passenger. Johnson soon sold the aircraft to early Warbird pilot John Church who reregistered the fighter as N198F and applied a new Navy-style scheme. From that point, it went through several owners and today flies as N8TF with Comanche Warbirds in Texas.



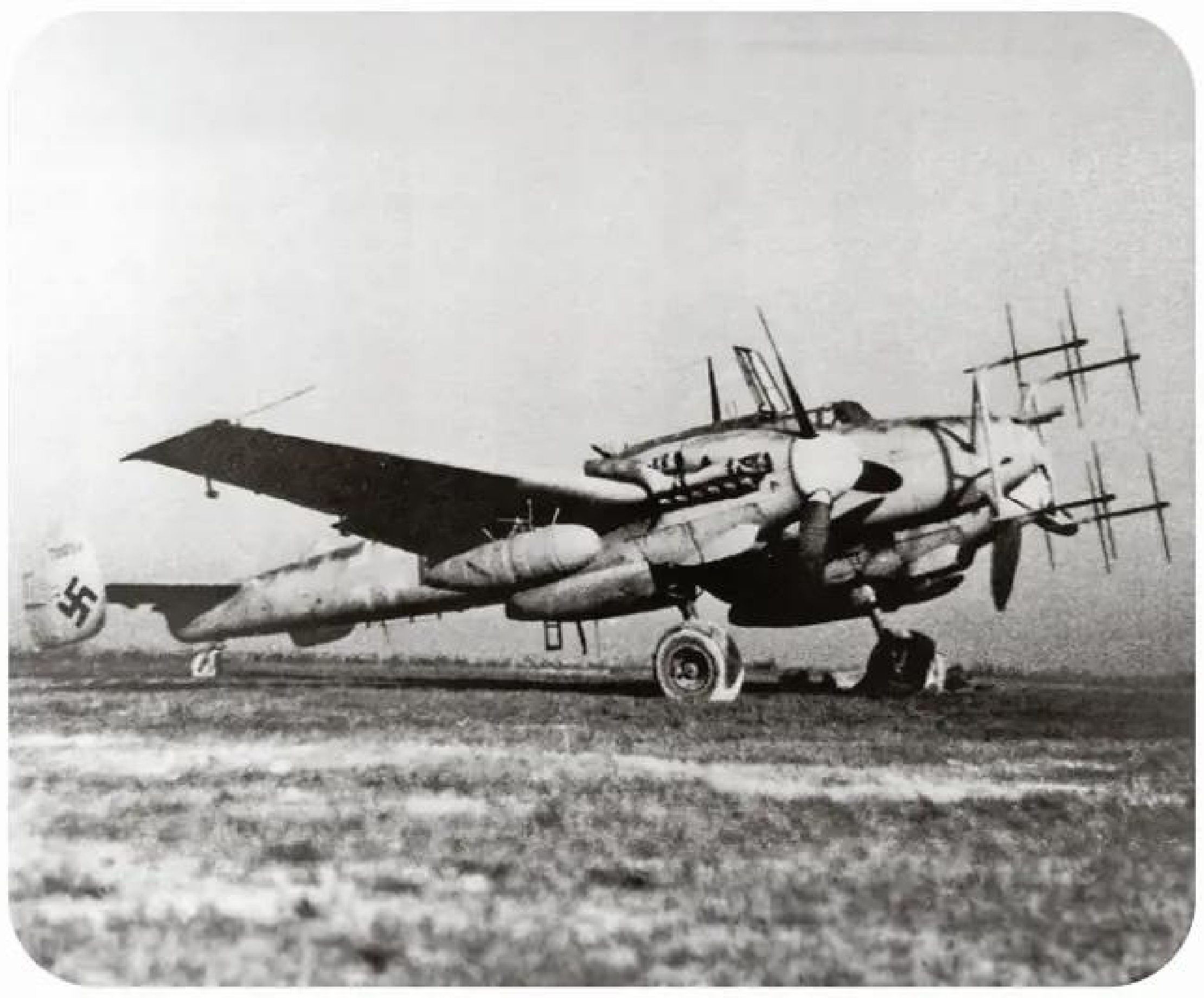
There was a flurry of excitement among aviation enthusiasts when two Douglas A-24/SBD-5 Banshee/Dauntless dive-bombers arrived at Orange County Airport during 1964. Research by Scott Thompson shows that both planes came from *CIA Mexicana Aerofoto* and XB-QUC was originally built as SBD-5 BuNo 54532 but, as Scott notes, that is not correct. Numerous SBD-5s were immediately transferred to the USAAF as A-24Bs and this BuNo corresponds to USAAF 42-54532 but that aircraft was lost in action during 1944. The photo, taken by W.T. Larkins, shows the plane on the Tallmantz ramp. It appears the aircraft was sold by the War Assets Administration in 1947 with an incorrect identity — probably a typo, which would not be improbable considering the vast number of aircraft disposals. With that ID, it became N1339V and was briefly flown as a skywriter before being sold south of the border. After arriving at Orange County, the plane was obtained by Ed Maloney. In 1971, it was sold to Robert Griffin, restored to airworthy condition as N54532 and then donated to the then-Confederate Air Force. However, the plane became a hangar queen until being taken over by the CAF wing in Atlanta. They did a nose to tail restoration and the SBD-5 is now a regular flyer with the registration N82GA.

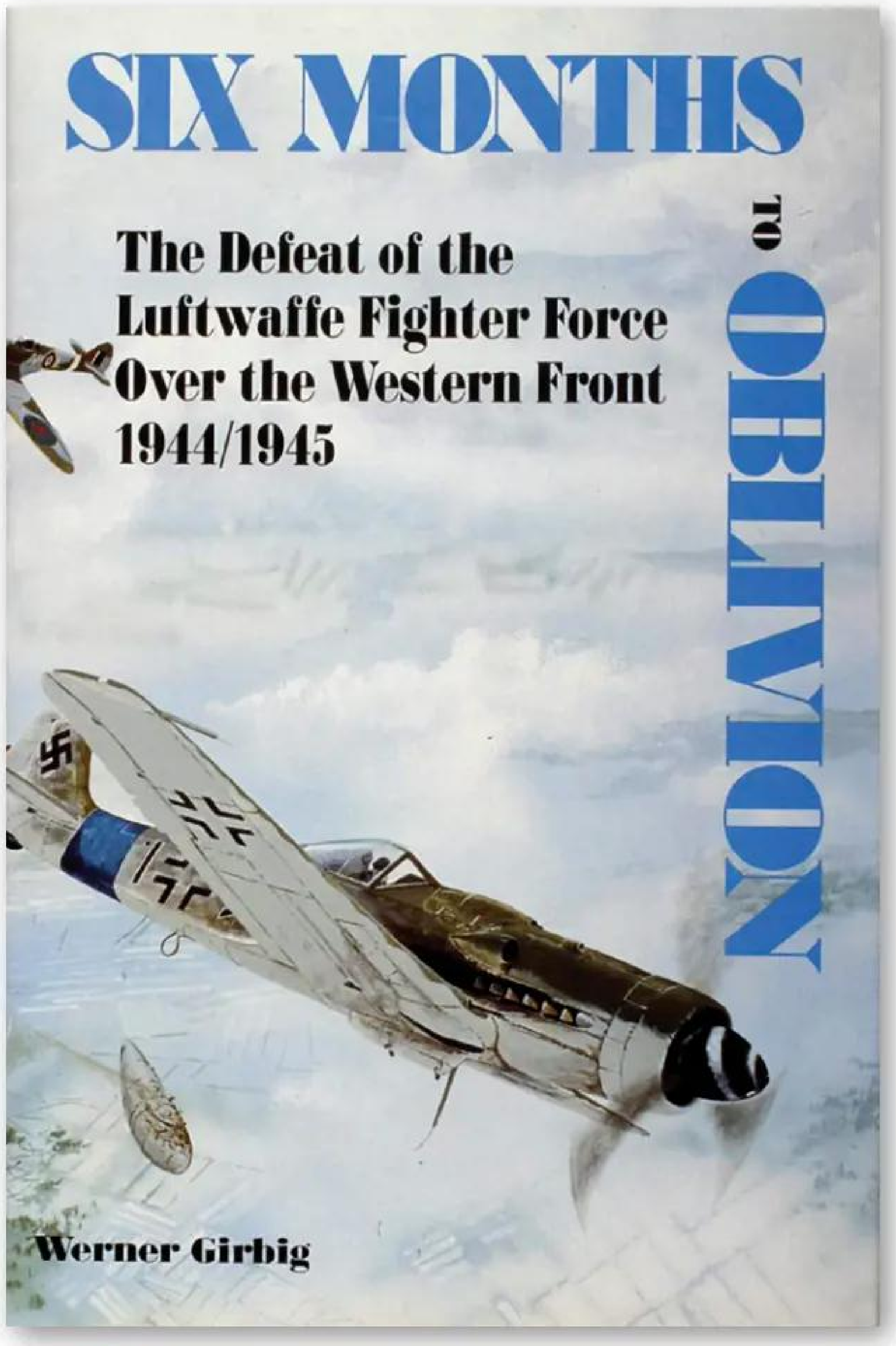


Parked next to the tower at Chino Airport, Elmer Ward prepares to run-up the R-2800 of his freshly-restored Bearcat. Registered NL3025, the aircraft replicates the Bearcat flown by famed aerobatic pilot Al Williams. “As a young man, I remember seeing Al Williams fly the *Gulfhawk 4th* and I was always impressed by not only the flying but also by the aircraft itself with its bright orange paint and sunburst wings. When I had a chance to own a Bearcat, there was no doubt in my mind about the color scheme.” **AC**

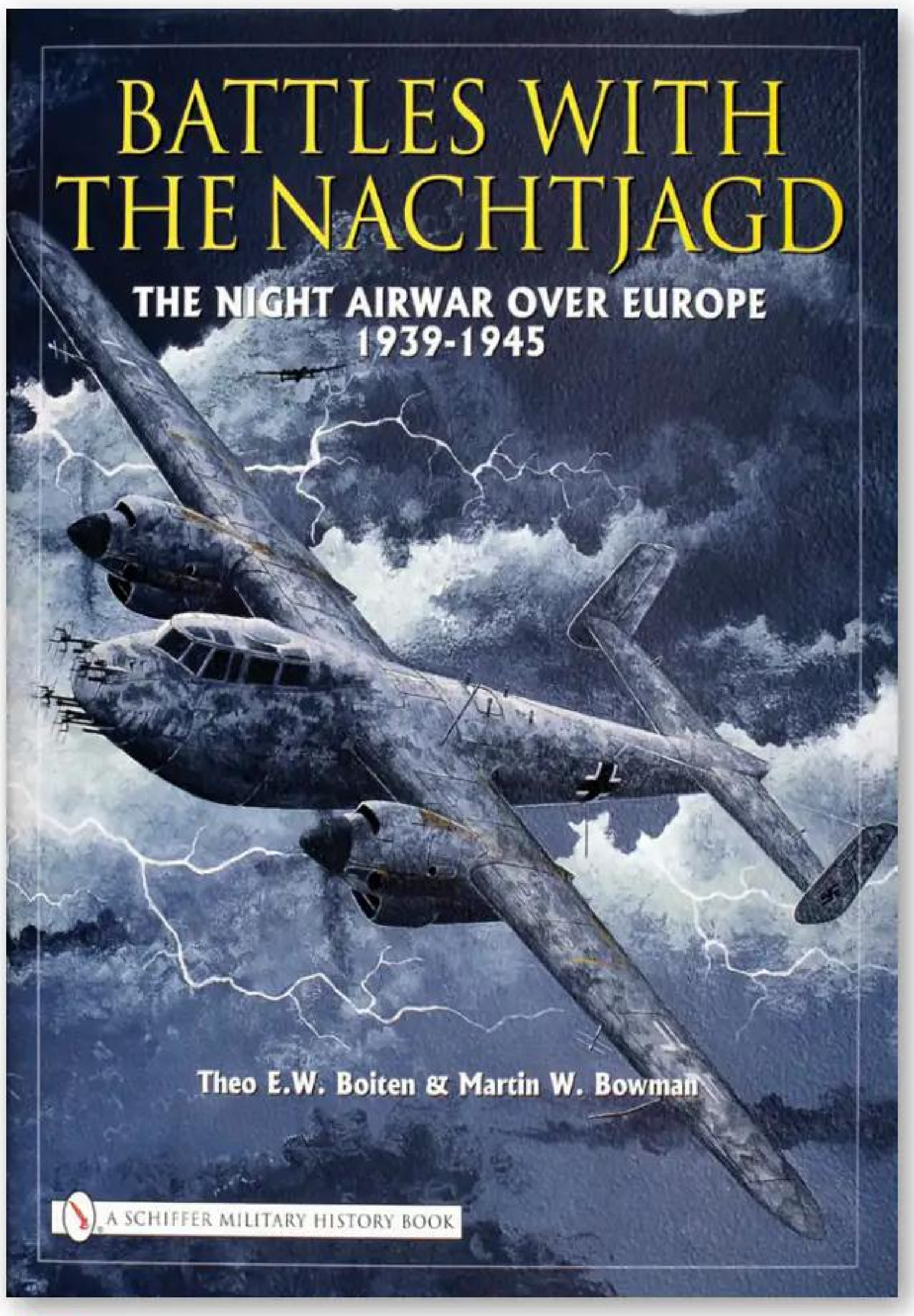
MORE NEW TITLES FROM THE AVIATION BOOK CLUB!

The Aviation Book Club (ABC) is pleased to present an extensive selection of books that will fit into any discerning aviation library. All books are carefully chosen by our staff and our contributors. Also, we are also offering great discounts for this Christmas Season!

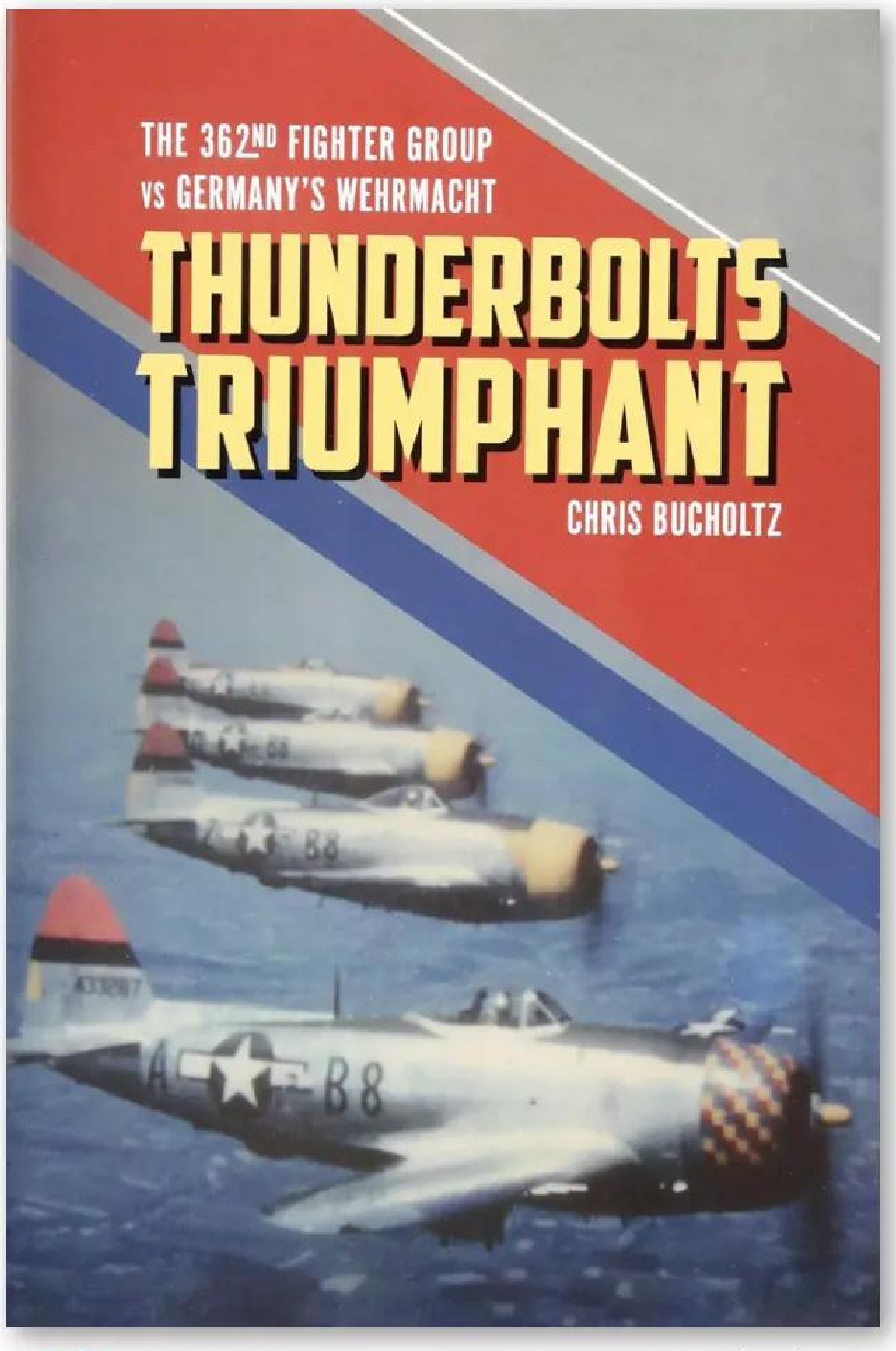



SIX MONTHS TO OBLIVION
The Defeat of the Luftwaffe Fighter Force Over the Western Front 1944/1945
Werner Girbig

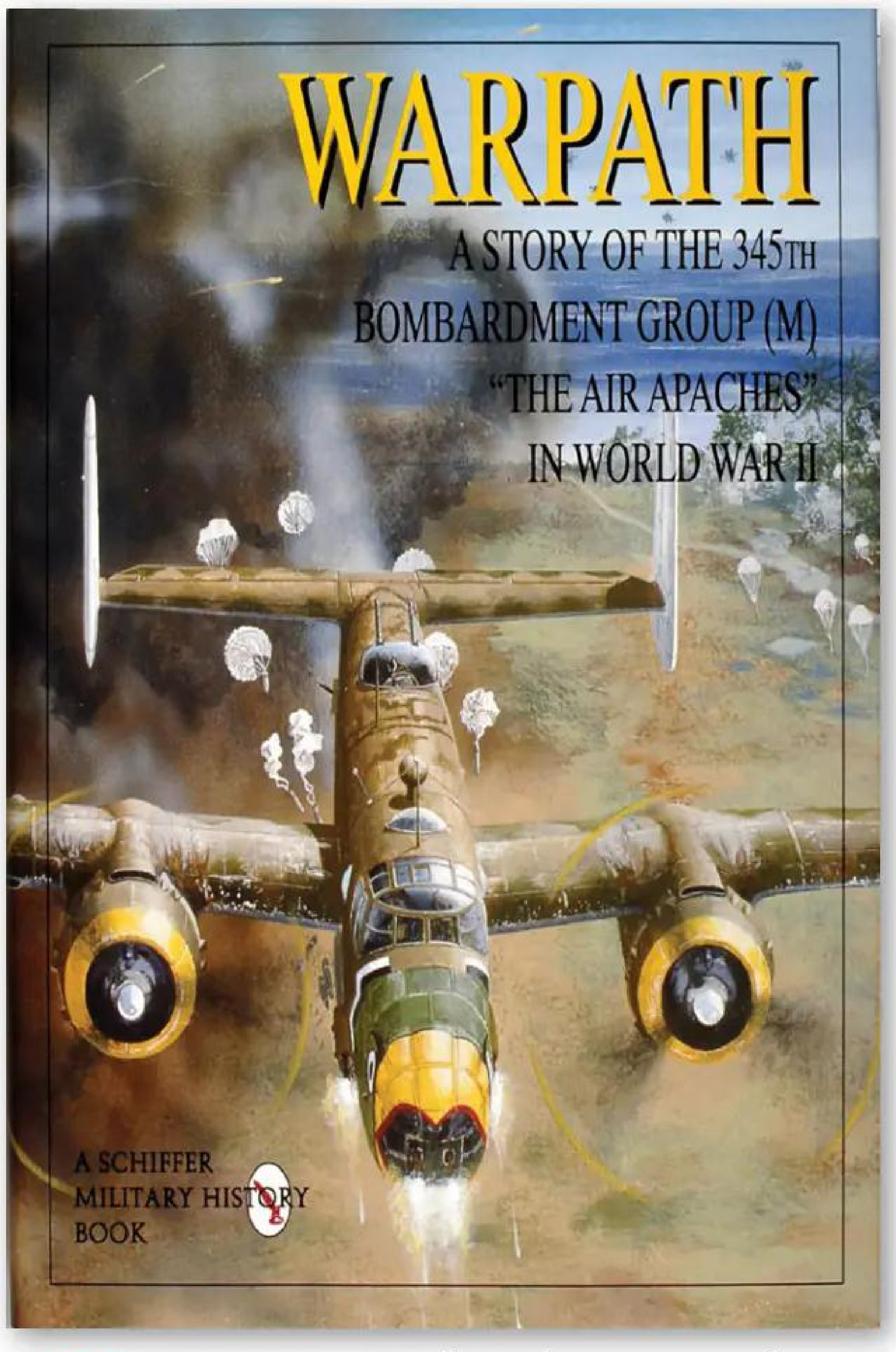
019: SIX MONTHS TO OBLIVION by Werner Girbig. Hardbound, 236 Pages. The defeat of the *Luftwaffe* fighter forces over the Western Front 1944/1945. PUB AT $30, NOW $24


BATTLES WITH THE NACHTJAGD
THE NIGHT AIRWAR OVER EUROPE 1939-1945
Theo E.W. Boiten & Martin W. Bowman
A SCHIFFER MILITARY HISTORY BOOK

020: BATTLES WITH THE NACHTJAGD by Theo E.W Boiten & Martin W. Bowman. Hardbound, 464 Pages. Massive volume details the parallel developments in aerial night-fighting by Germany and night-bombing by Britain during WWII. PUB AT $60, NOW $46


THE 362ND FIGHTER GROUP VS GERMANY'S WEHRMACHT
THUNDERBOLTS TRIUMPHANT
CHRIS BUCHOLTZ

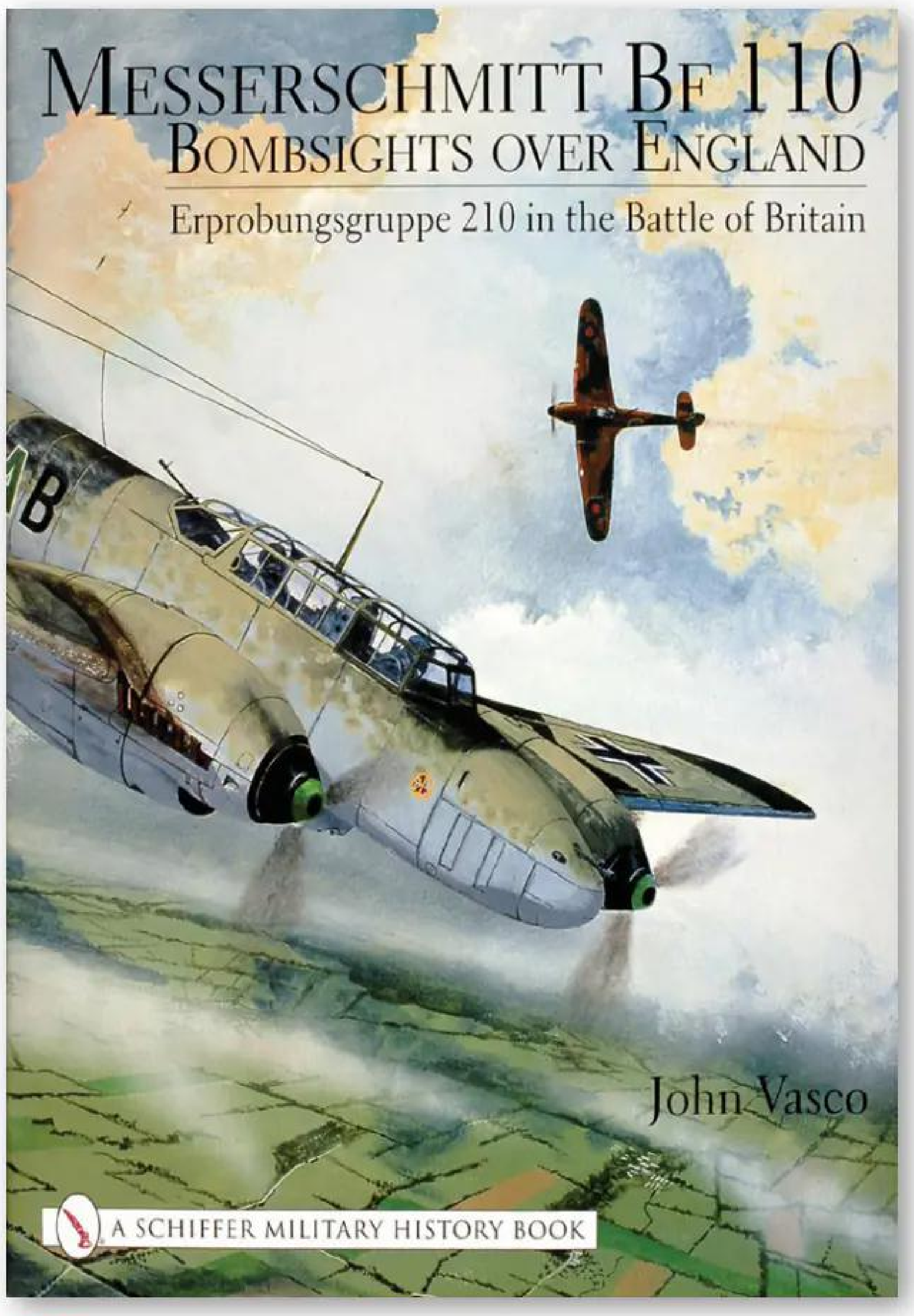
021: THUNDERBOLTS TRIUMPHANT by Chris Bucholtz. Hardbound, 272 Pages. Life and times of the 362nd Fighter Group and their Republic P-47s in the deadly war with Germany's ground forces. PUB AT $38, NOW $29


WARPATH
A STORY OF THE 345TH BOMBARDMENT GROUP (M) "THE AIR APACHES" IN WORLD WAR II
A SCHIFFER MILITARY HISTORY BOOK

022: WARPATH Hardbound, 304 Pages. This is a facsimile reprint of the history of the 345th Bomb Group – the famed "Air Apaches" and their Mitchells – in their war against Japan. PUB AT $50, NOW $38

EXTRA DISCOUNT!

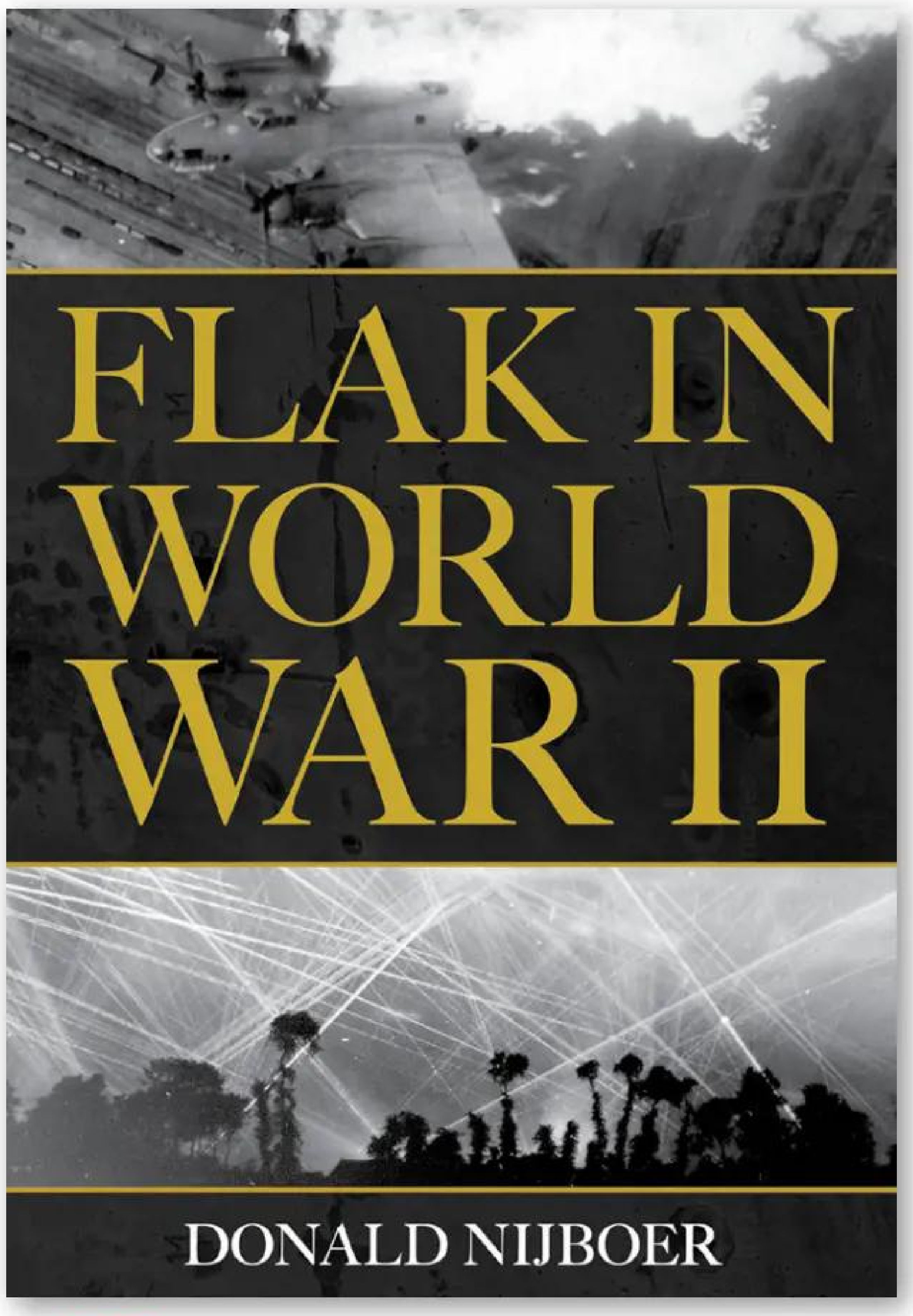
BUY OVER $100 AND TAKE OFF AN ***ADDITIONAL 10%***


MESSERSCHMITT BF 110
BOMBSIGHTS OVER ENGLAND
Erprobungsgruppe 210 in the Battle of Britain
John Vasco
A SCHIFFER MILITARY HISTORY BOOK

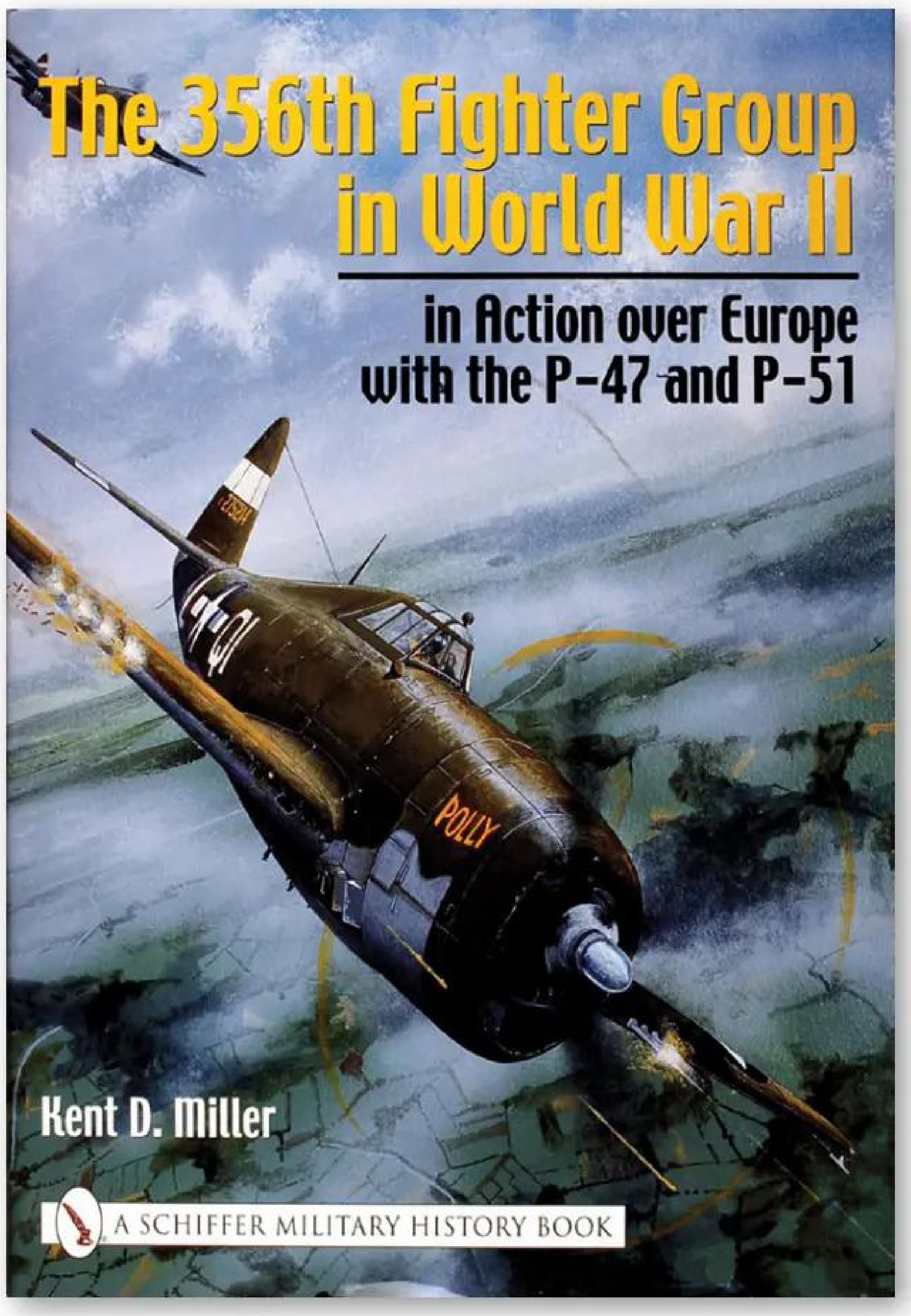
023: MESSERSCHMITT Bf 110: BOMBSIGHTS OVER ENGLAND by John Vasco. Hardbound, 192 Pages. The complete history of *Erprobungsgruppe 210* and their twin-engine fighter-bombers at war during the decisive Battle of Britain. PUB AT $50, NOW $38

HITLER'S
REVENGE
WEAPONS
THE FINAL BLITZ OF LONDON
NIGEL WALPOLE

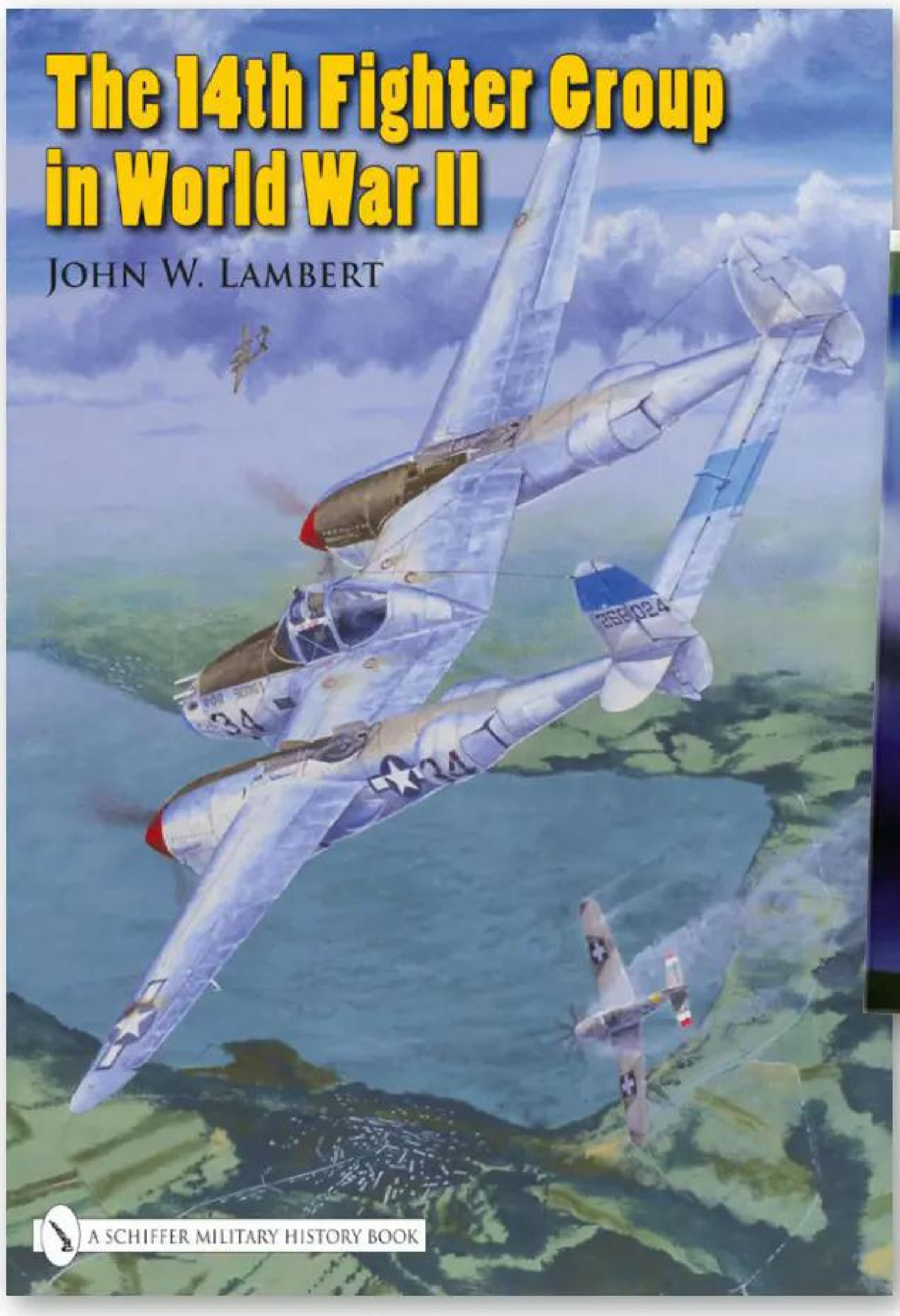
024: HITLER'S REVENGE WEAPONS: THE FINAL BLITZ OF LONDON by Nigel Walpole. Softbound, 232 Pages. Thorough study of the V-1 and V-2 weapons launched at London in raids that killed 31,000 in London and destroyed or seriously damaged 1.6 million homes throughout Britain. PUB AT $30, NOW $20


FLAK IN
WORLD
WAR II
DONALD NIJBOER

025: FLAK IN WORLD WAR II by Donald Nijboer. Hardbound, 232 Pages. During WWII, over one-half of all American aircraft losses were caused by German *flak* units. Comprehensive book describes the weapons, tactics, and units. PUB AT $40, NOW $28


The 356th Fighter Group
in World War II
in Action over Europe
with the P-47 and P-51
Kent D. Miller
A SCHIFFER MILITARY HISTORY BOOK

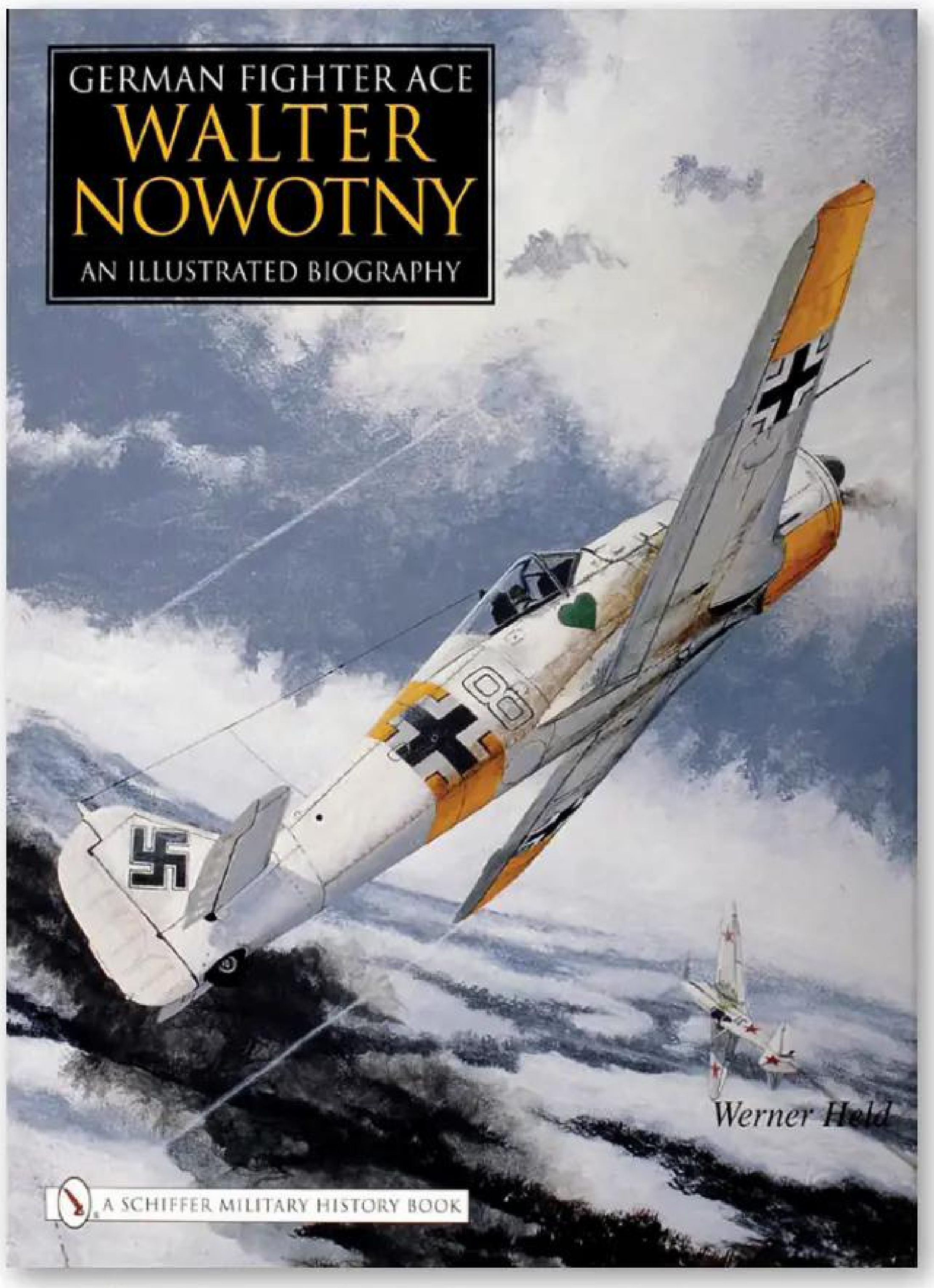
026: 356th FIGHTER GROUP IN WORLD WAR II by Kent D. Miller. Hardbound, 336 Pages. Heavy action against the *Luftwaffe* with Republic P-47 Thunderbolts and North American P-51 Mustangs. PUB AT $60, NOW $48


The 14th Fighter Group
in World War II
JOHN W. LAMBERT
A SCHIFFER MILITARY HISTORY BOOK

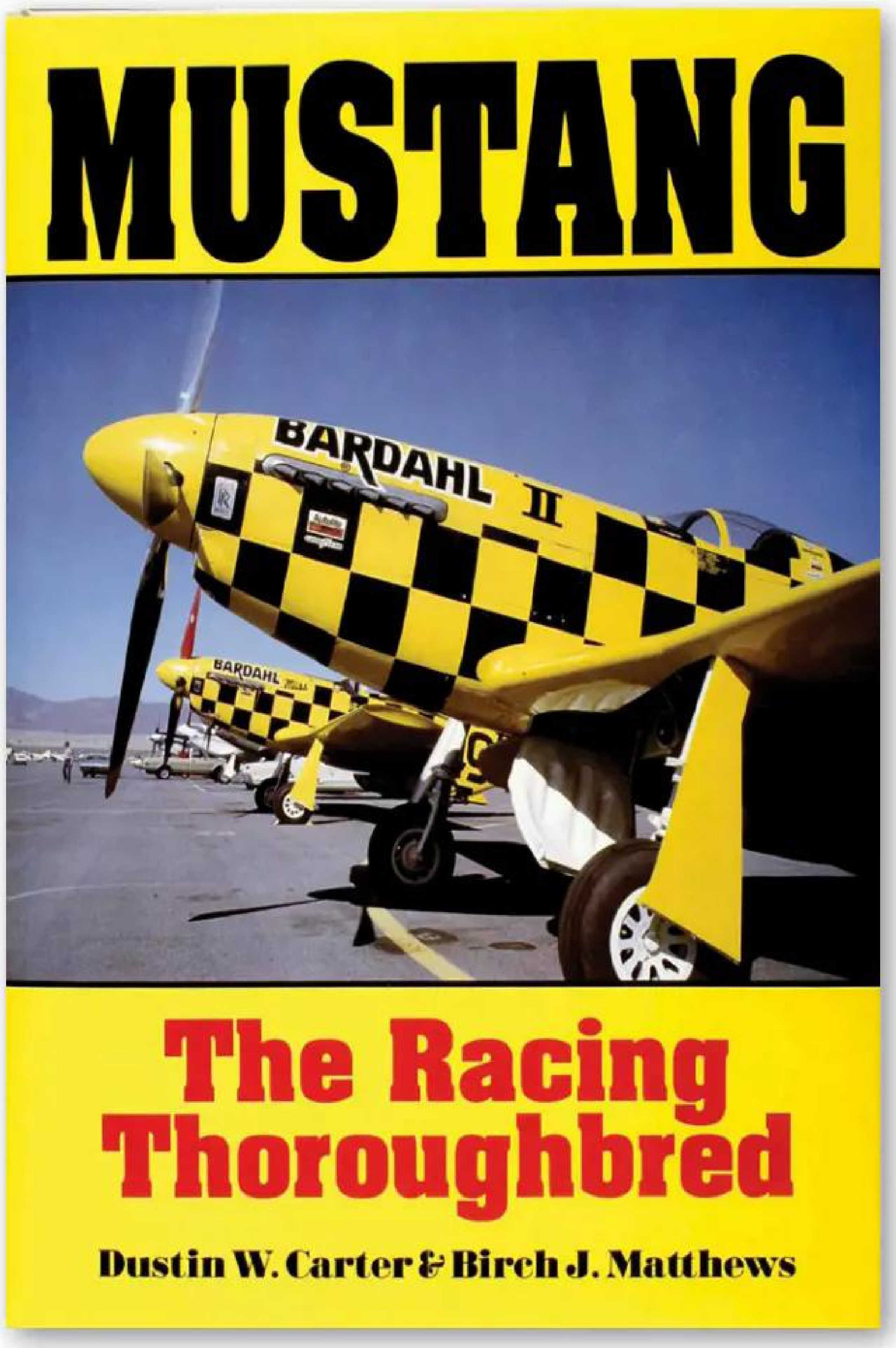
027: THE 14th FIGHTER GROUP IN WORLD WAR II by John W. Lambert. Hardbound, 176 Pages. Complete history of how the 14th FG took unprepared pilots to war in the new P-38 fighter with many unpublished photos. PUB AT $45, NOW $36

DECALS PRINTED BY CARTOGRAF
UNITS 7
JG 53
"Pik As"

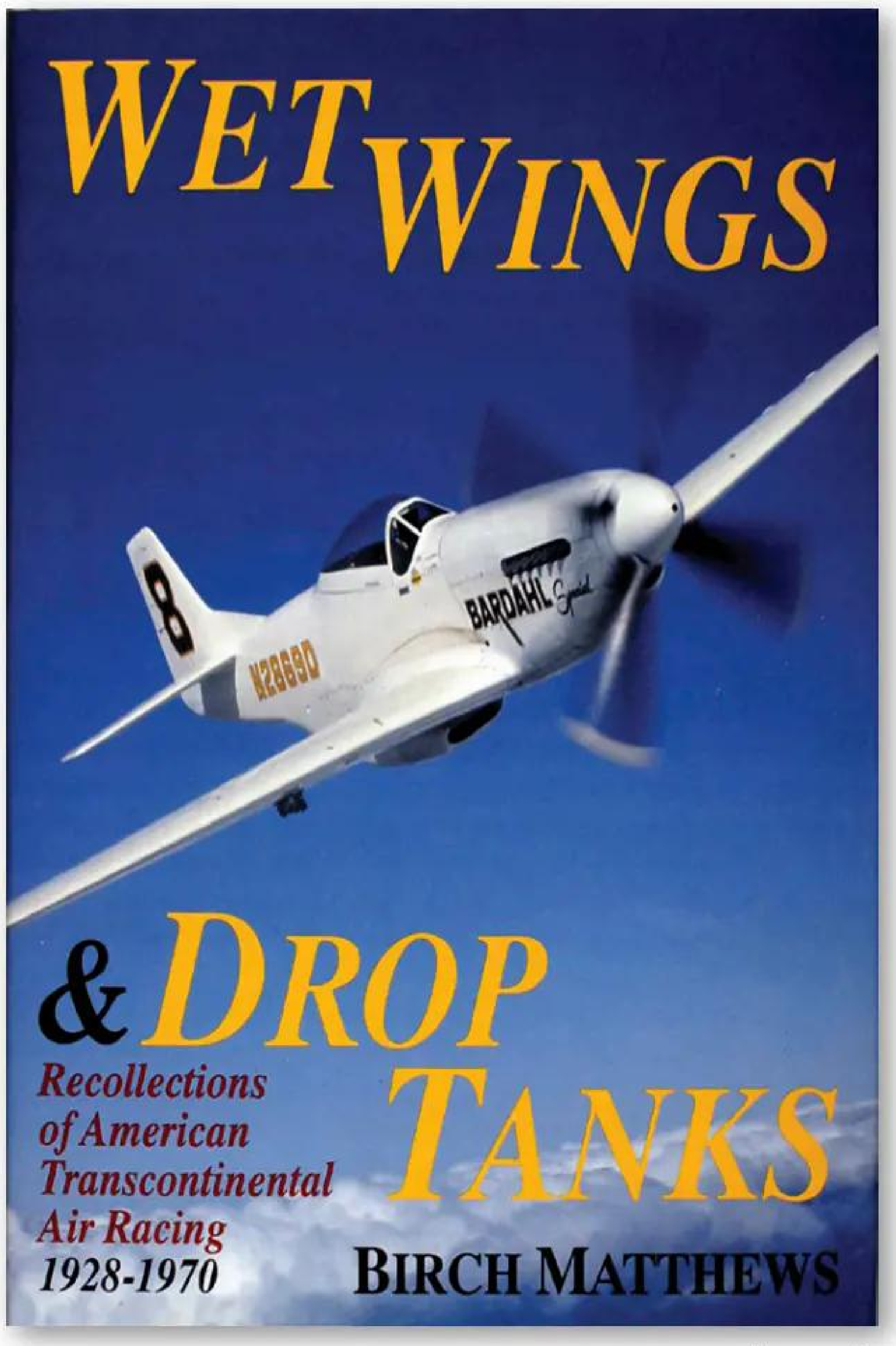
028: JG 53 PIK AS by Marek J. Murawski. Softbound, 30 Pages. Aimed at the modeler and camouflage enthusiast, this book is an examination of one of the *Luftwaffe's* most famous fighter units and has a good selection of photos, color profiles, and comes with three sets of decals. PUB AT $20, NOW $12


GERMAN FIGHTER ACE
WALTER
NOWOTNY
AN ILLUSTRATED BIOGRAPHY
Werner Held
A SCHIFFER MILITARY HISTORY BOOK

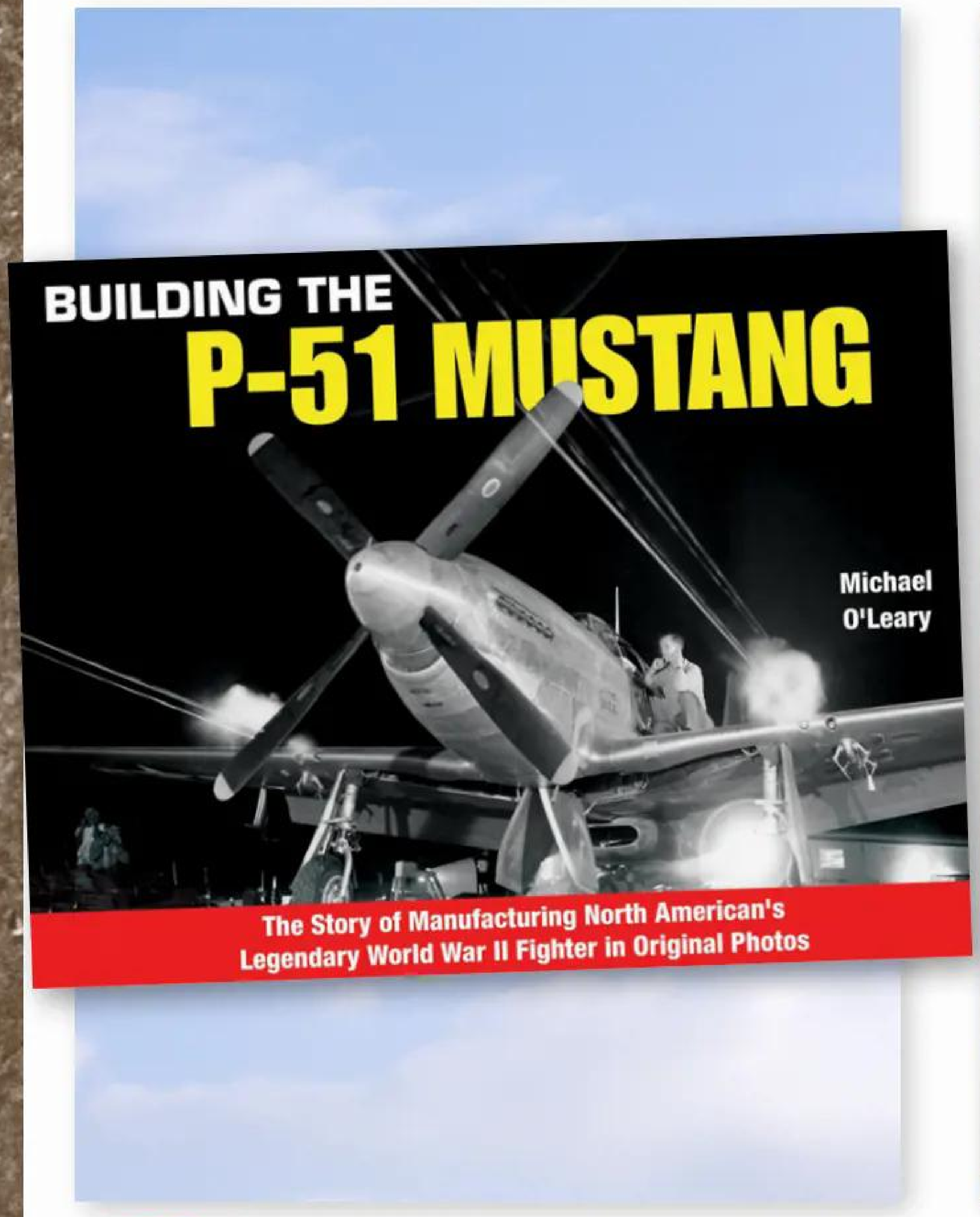
029: GERMAN FIGHTER ACE WALTER NOWOTNY by Werner Held. Hardbound, 169 Pages. Heavily-illustrated biography of one of the *Luftwaffe's* most famous WWII aces, this book examines his 258 aerial victories as well as his command of the first Me 262 unit. PUB AT $45, NOW $36


MUSTANG
BARDAHL II
The Racing
Thoroughbred
Dustin W. Carter & Birch J. Matthews

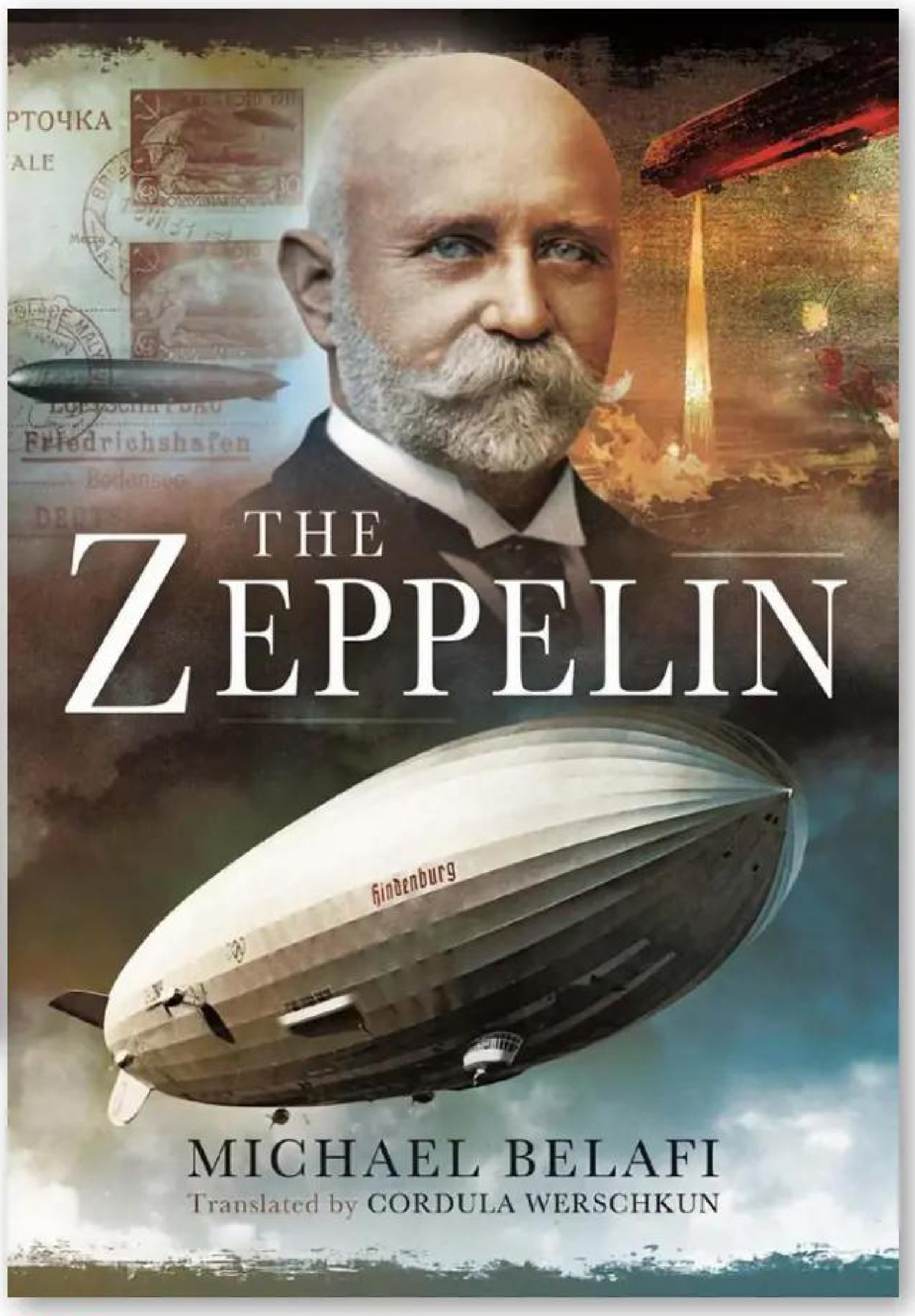
030: MUSTANG: RACING THOROUGHBRED by D.W. Carter and B.J. Matthews. Hardbound, 208 Pages. How the P-51 developed into an Unlimited air racer. PUB AT $40, NOW $32


WET WINGS
& DROP TANKS
Recollections of American Transcontinental Air Racing 1928-1970
BIRCH MATTHEWS

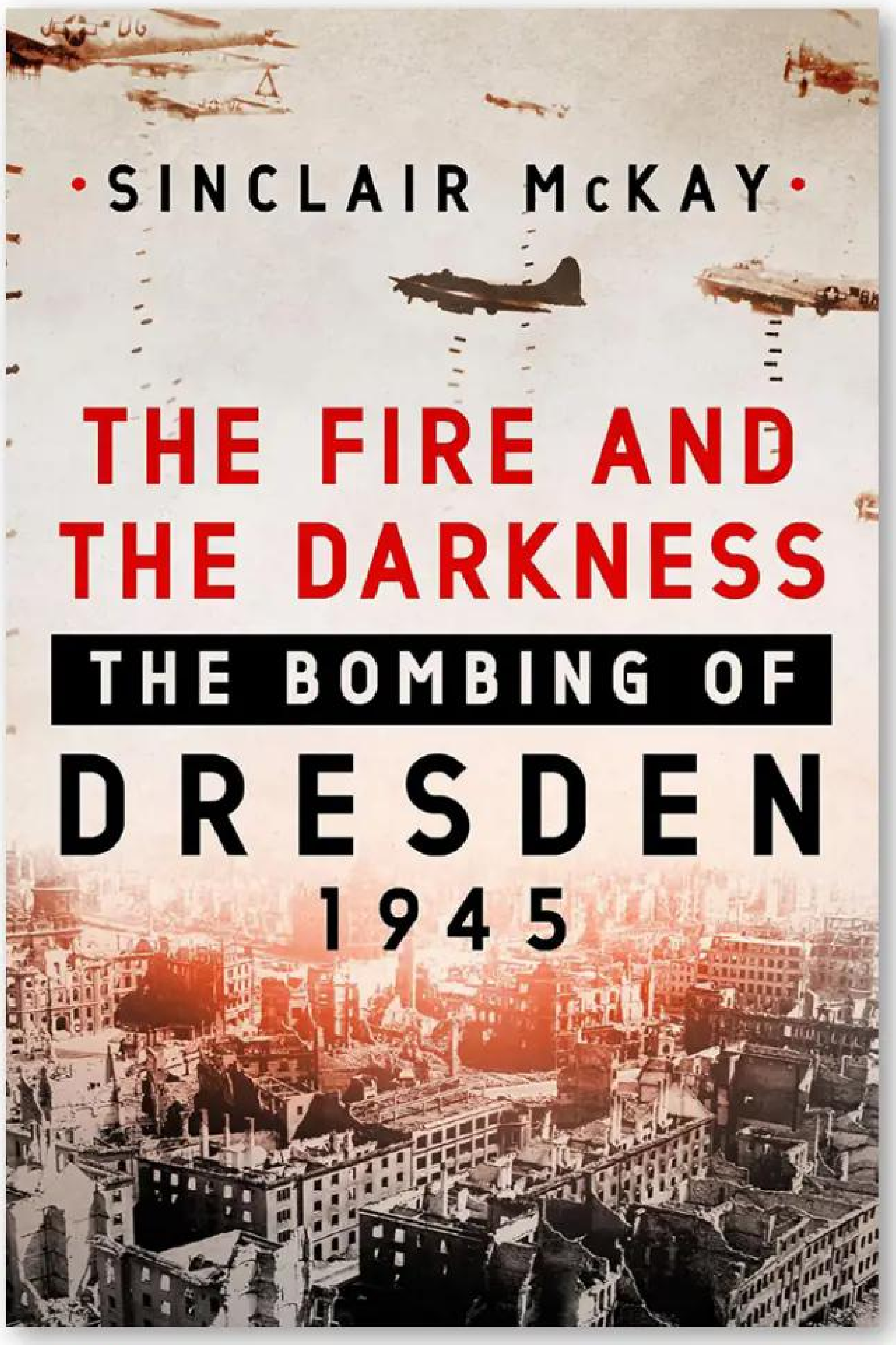
031: WET WINGS AND DROP TANKS by Birch Matthews. Hardbound, 272 Pages. The complete history of transcontinental air racing from 1928 through 1970. Heavily illustrated. PUB AT $45, NOW $34


BUILDING THE
P-51 MUSTANG
Michael O'Leary
The Story of Manufacturing North American's Legendary World War II Fighter in Original Photos

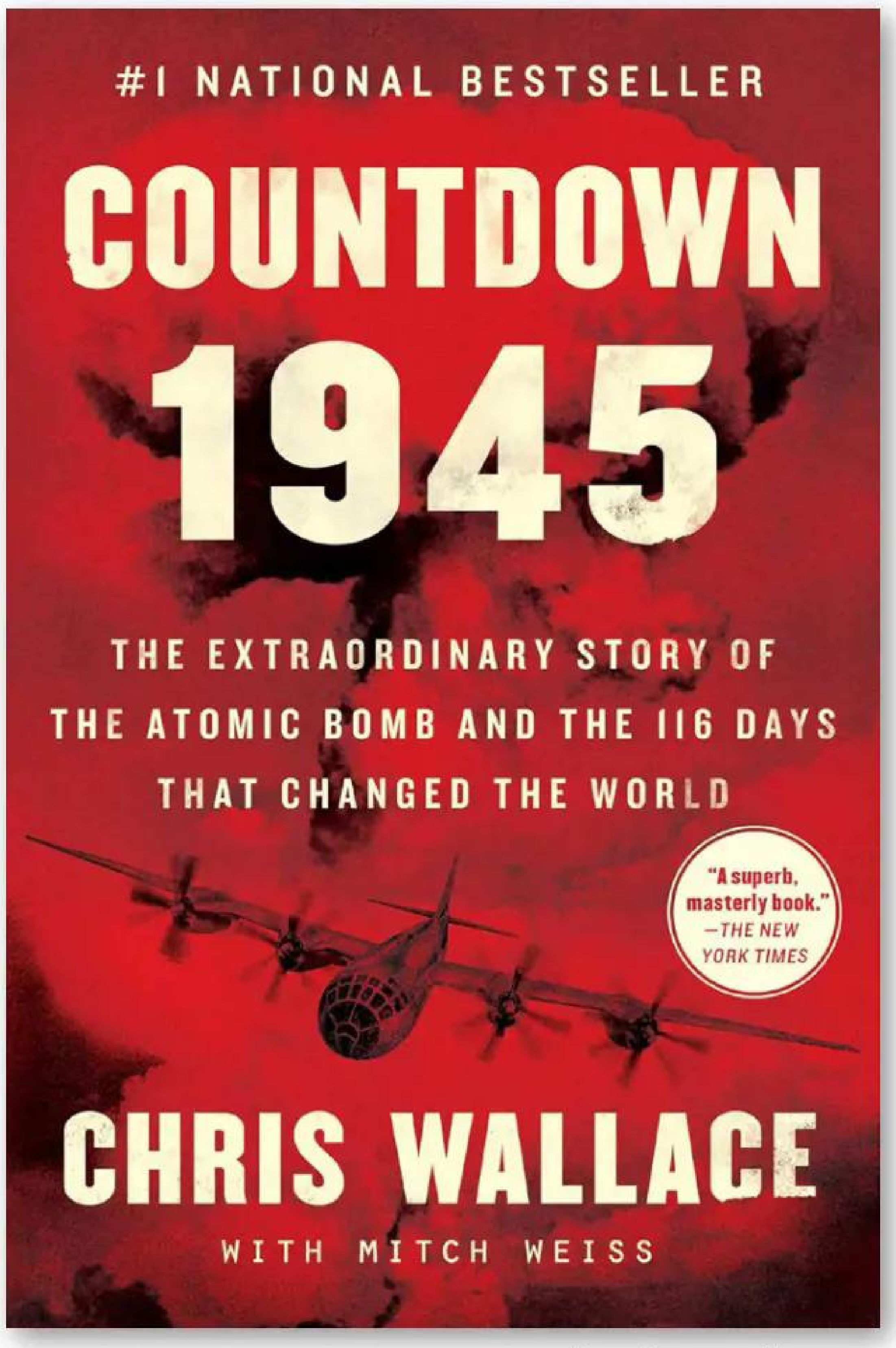
032: BUILDING THE P-51 MUSTANG by Michael O'Leary. Softbound, 240 Pages. Complete history on how the North American P-51 was designed and built with hundreds of ultra-detailed photographs. Autographed. PUB AT $35, NOW $26


THE
ZEPPELIN
Hindenburg
MICHAEL BELAFI
Translated by CORDULA WERSCHKUN

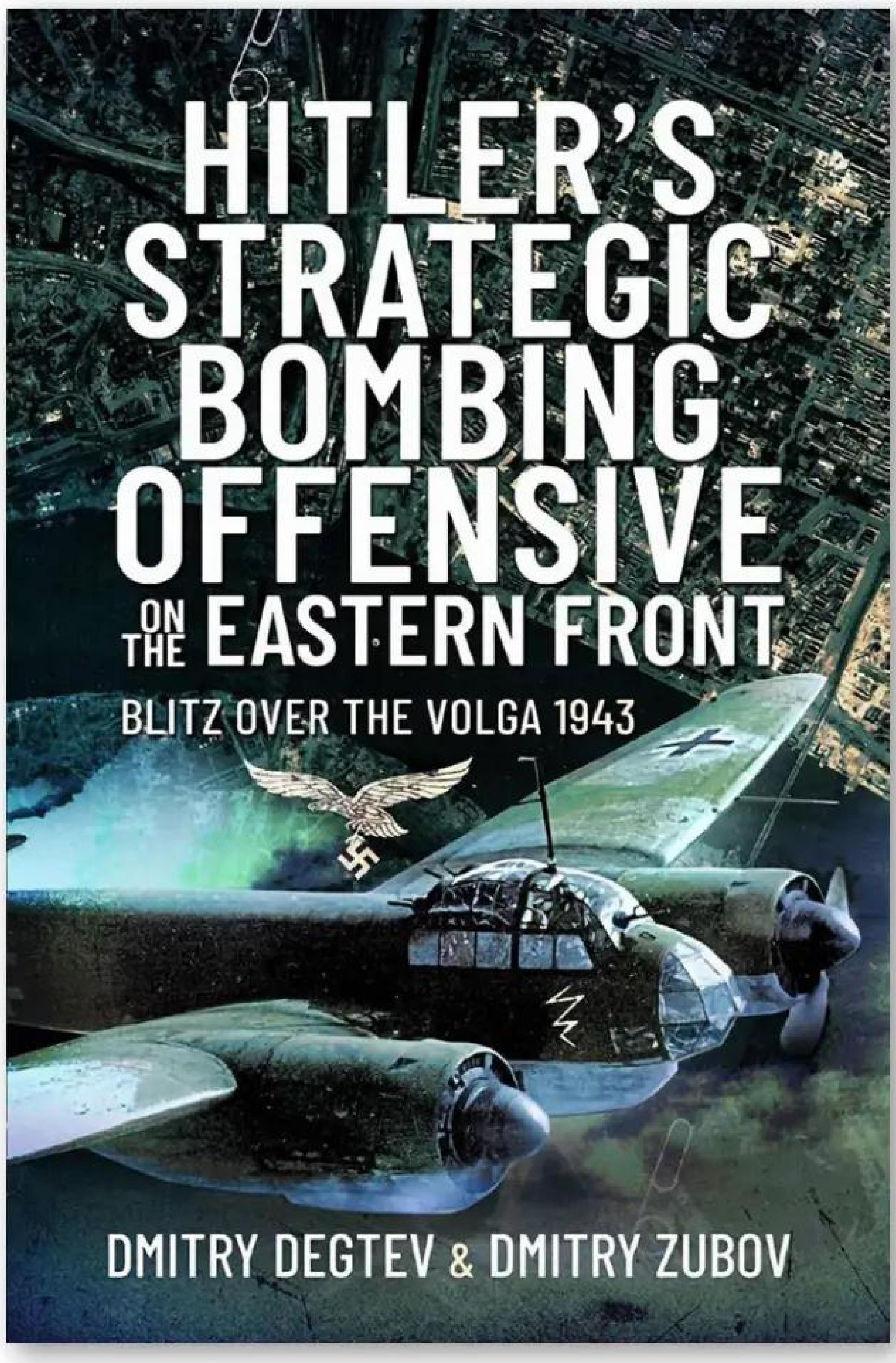
033: THE ZEPPLIN by Michael Belafi. Hardbound, 211 Pages. The complete history of the rigid airships called "zeppelins" – from their early development to the terror raids on Britain during WWI, to their use as ocean liners of the air. PUB AT $50, NOW $32


SINCLAIR McKAY
THE FIRE AND
THE DARKNESS
THE BOMBING OF
DRESDEN
1945

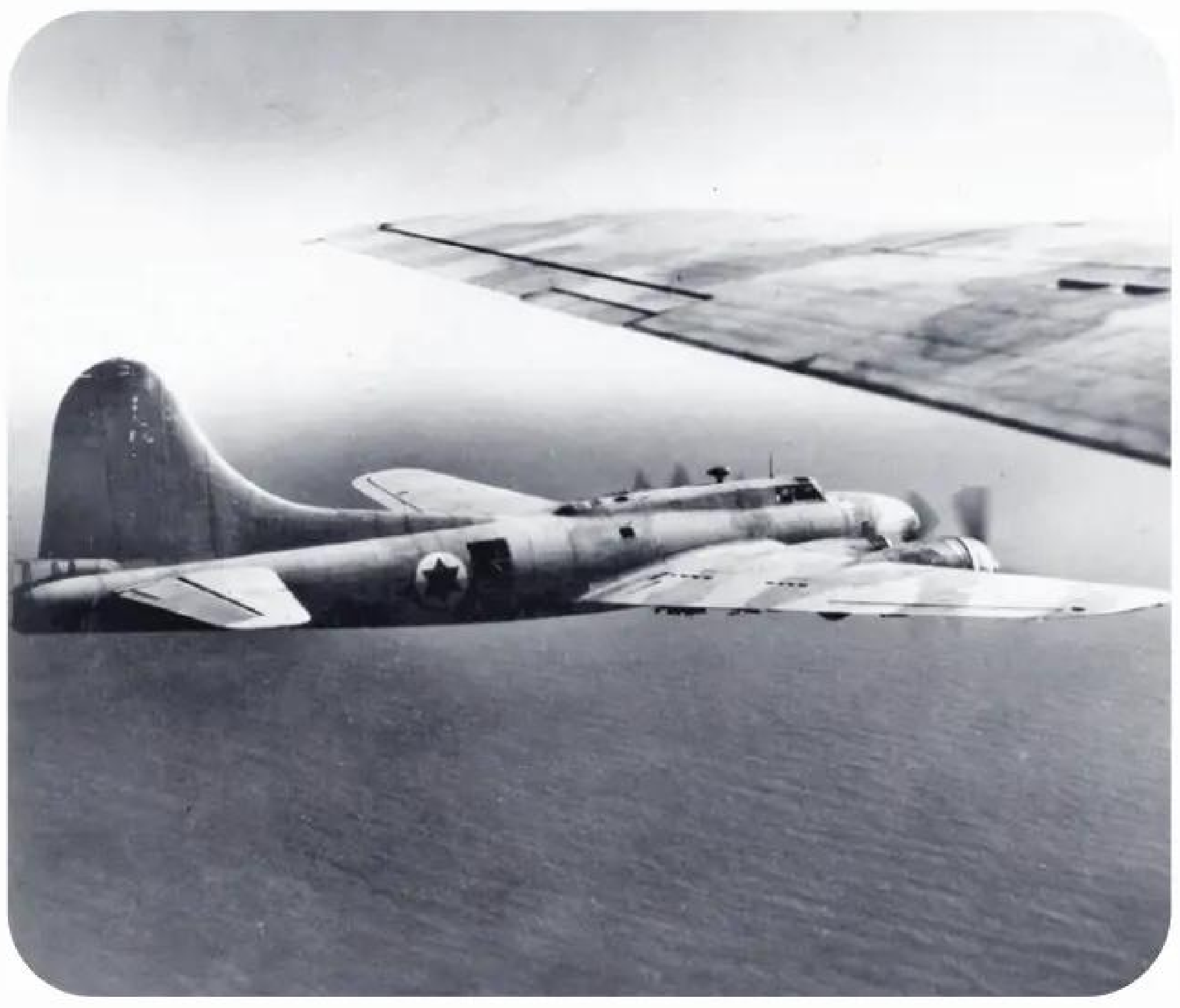
034: THE FIRE AND THE DARKNESS by Sinclair McKay. Hardbound, 369 Pages. The horrific Royal Air Force destruction of a major German city during WWII. PUB AT $33, NOW $26


#1 NATIONAL BESTSELLER
COUNTDOWN 1945
THE EXTRAORDINARY STORY OF THE ATOMIC BOMB AND THE 116 DAYS THAT CHANGED THE WORLD
"A superb, masterly book." —THE NEW YORK TIMES
CHRIS WALLACE
WITH MITCH WEISS

035: COUNTDOWN 1945 by Chris Wallace. Hardbound, 312 Pages. The story of the atomic bomb and the 116 days leading up to the B-29 atomic bombings of Japan. PUB AT $30, NOW $24


HITLER'S STRATEGIC BOMBING OFFENSIVE ON THE EASTERN FRONT
BLITZ OVER THE VOLGA 1943
DMITRY DEGTEV & DMITRY ZUBOV

036: HITLER'S STRATEGIC BOMBING OFFENSIVE ON THE EASTERN FRONT by D. Degtev and D. Zubov. The definitive account of the 1943 Blitz over the Volga. PUB AT $43, NOW $32



QUANTITY	TITLE NAME		PRICE EACH	TOTAL DUE
	019	SIX MONTHS TO OBLIVION	$24	
	020	BATTLES WITH THE NACHTJAGD	$24	
	021	THUNDERBOLTS TRIUMPHANT	$29	
	022	WARPATH	$38	
	023	MESSERSCHMITT Bf 110	$38	
	024	HITLER'S REVENGE WEAPONS	$20	
	025	FLAK IN WORLD WAR II	$28	
	026	356th FIGHTER GROUP IN WWII	$48	
	027	14th FIGHER GROUP IN WWII	$36	
	028	JG 53 PIK AS	$12	
	029	GERMAN FIGHTER ACE W. NOWOTNY	$36	
	030	MUSTANG: RACING THOROUGHBRED	$32	
	031	WET WINGS & DROP TANKS	$34	
	032	BUILDING THE P-51 MUSTANG	$26	
	033	THE ZEPPLIN	$32	
	034	THE FIRE AND THE DARKNESS	$26	
	035	THE COUNTDOWN	$24	
	036	HITLER'S STRATEGIC BOMBER OFFENSIVE	$32	
	ORDER OVER $100 AND TAKE OFF AN ADDITIONAL 10%!			

(Domestic Postage is included in the purchase price. Canadian and foreign orders please call 1-818-700-6868 or email *ed@challengeweb.com* for additional postage cost by title.)

DEDUCT DISCOUNT	
MERCHANDISE TOTAL	
CA Residents add 9% Sales Tax	
TOTAL DUE (U.S. Funds Only)	

CALL 818-700-6868 FOR IMMEDIATE SERVICE!

Name ____________________

Address ____________________

City ____________________ State__________ Zip + 4 __________

Telephone Number (in the event we need to contact you): ____________________

E-mail address: ____________________

EXTRA DISCOUNT!

BUY OVER $100 AND TAKE OFF AN ***ADDITIONAL 10%***

Challenge AVIATION BOOK CLUB

Payment Enclosed (Orders must be prepaid in U.S. funds)

○Check ○Money Order ○Credit Card

Card # ____________________

CVV # ____________________

Expiration Date ____________________

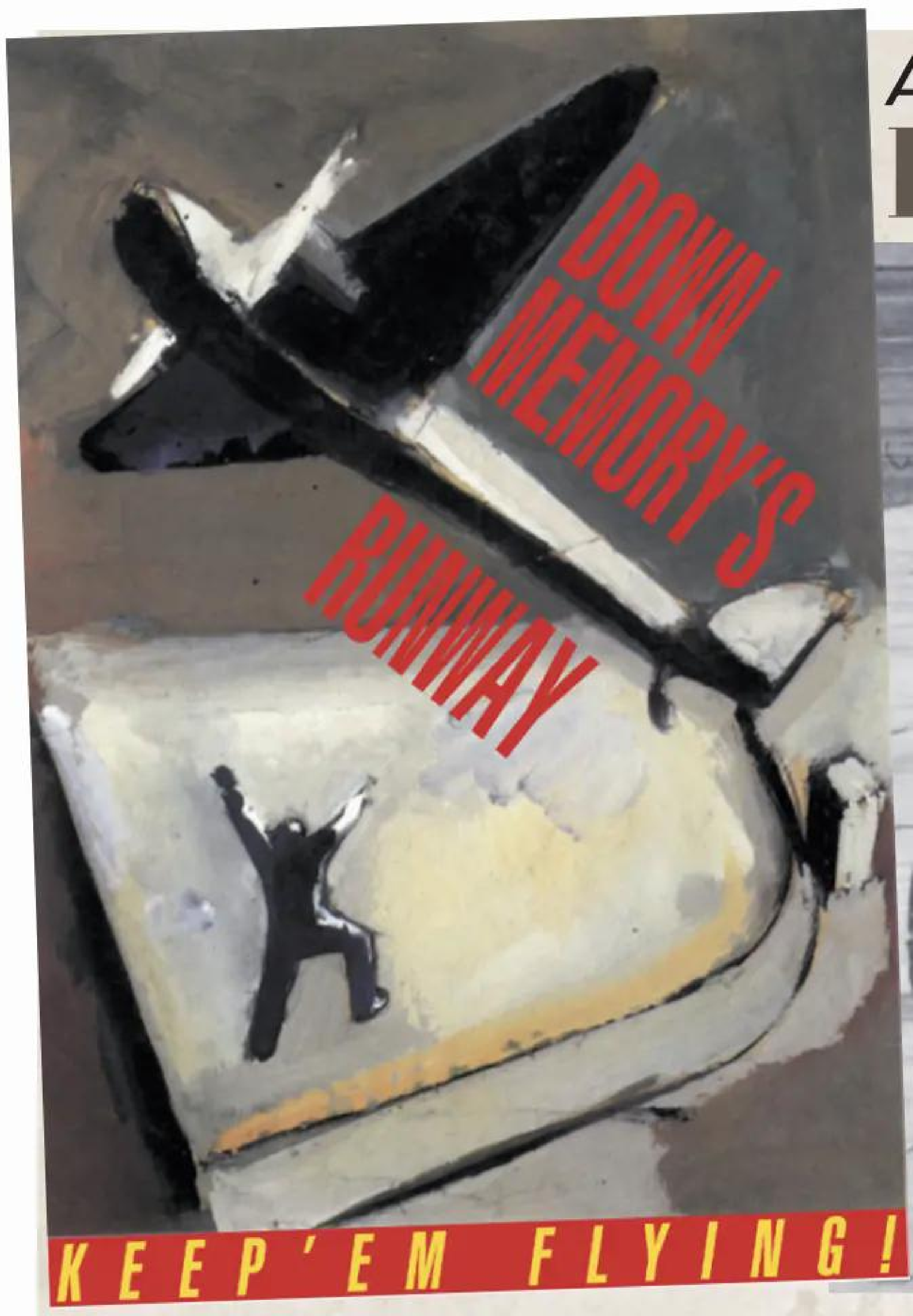
Signature____________________

SEND TO:

CHALLENGE ABC
9800-D Topanga Canyon Blvd. #368
Chatsworth, CA 91311

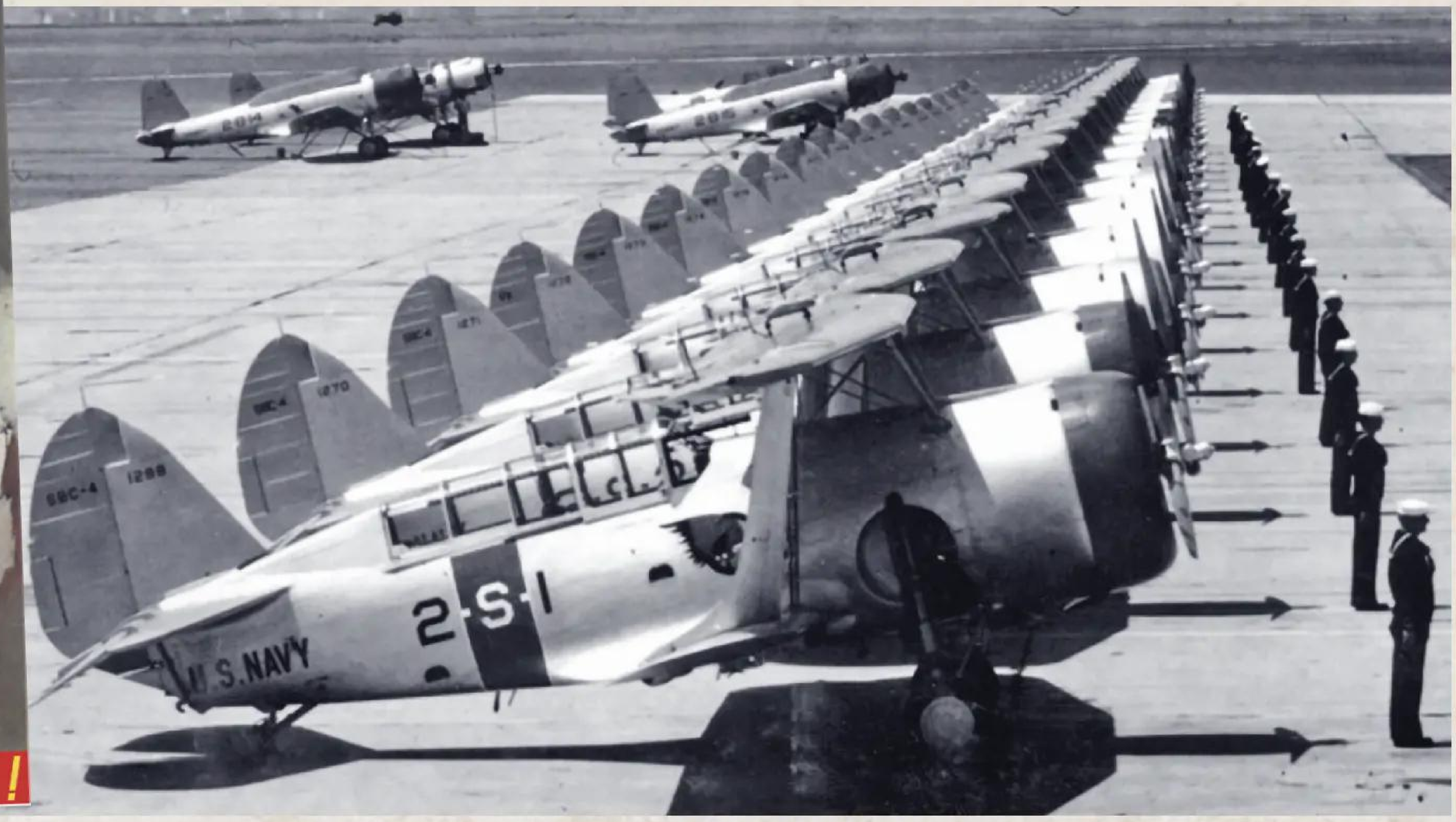
OR, ORDER AT:

1-818-700-6868

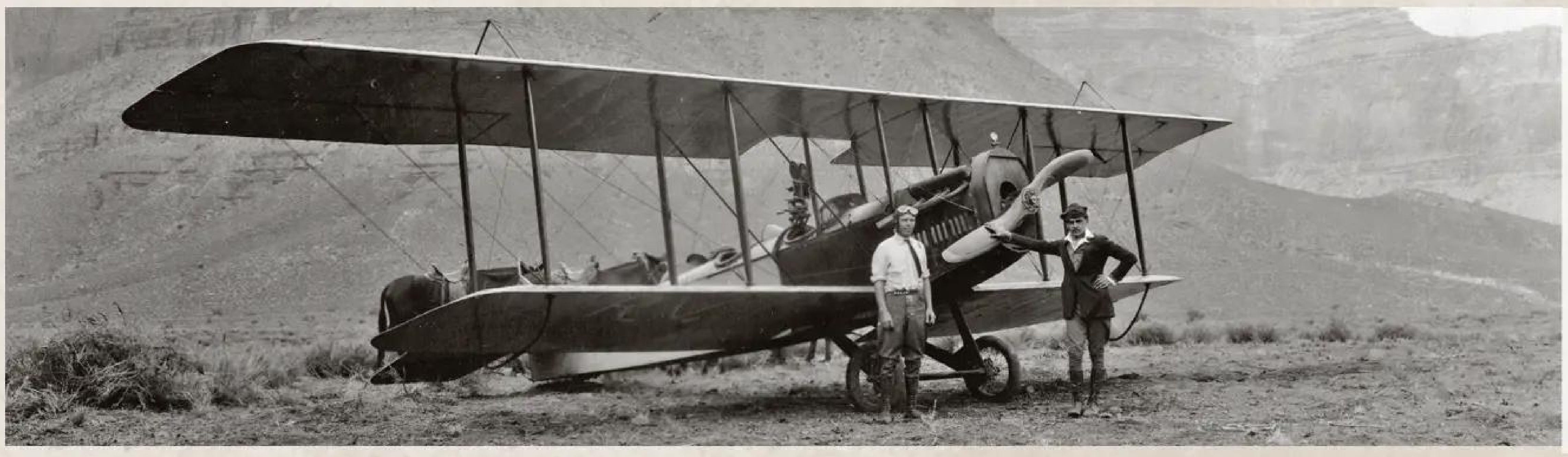


AMERICAN AIRCRAFT FROM AVIATION'S GLORIOUS PAST

BY NORM TAYLOR

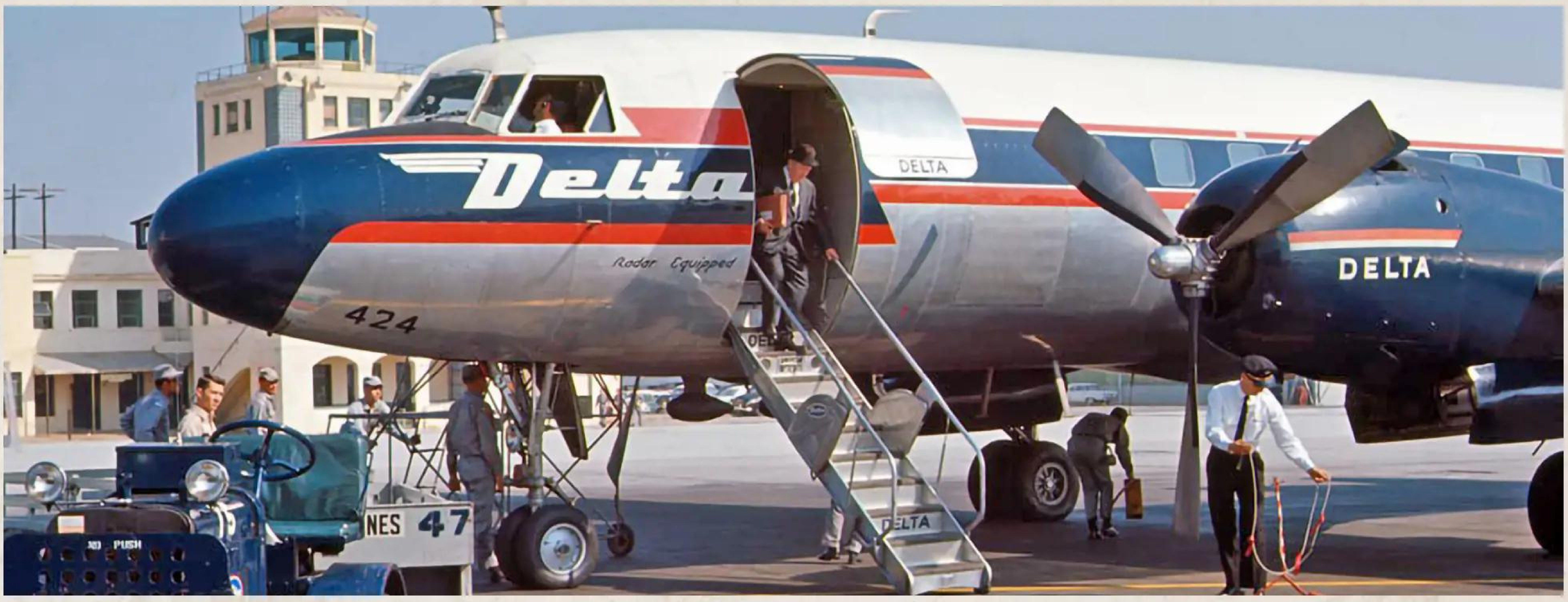


What makes this photo of a magnificent line-up (something the Navy and Air Corps would come to regret at Pearl Harbor) of Curtiss SBC-4 Helldivers interesting, is the fact that these were the last US military combat biplanes. At that time of the Japanese attack, there were 69 SBC-3 and 117 SBC-4 Helldivers in service. The USS *Hornet* (CV-8) was the last US carrier to operate the type (VB-8, VS-8). The Marines, on 7 December, were flying eleven SBC-4s with VMO-25 at Quantico, the only active squadron with the type. The rest were being flown by Reserves and various detachments. However, with the war VMO-151 was rushed to San Diego for anti-submarine work. By March 1942, the unit was back on the East Coast and its now 22 Helldivers were being loaded on ships for the Pacific War. The unit had 27 pilots — only three experienced in the type, 17 just out of flight school, and a half-dozen transferred from fighters. The squadron found itself in very primitive conditions at Samoa and began daily operations to intercept enemy aircraft and submarines (one depth charge carried). In September 1942, the unit was redesignated VMSB-151 and then spun off another squadron — VMO-155 with ten SBC-4s. VMSB-151 received Dauntlesses in June 1943. Amazingly, VMO-155 combined its Helldivers with F4F-3Ps and operated nearly to the end of the war. Unfortunately, photos are few and far between.

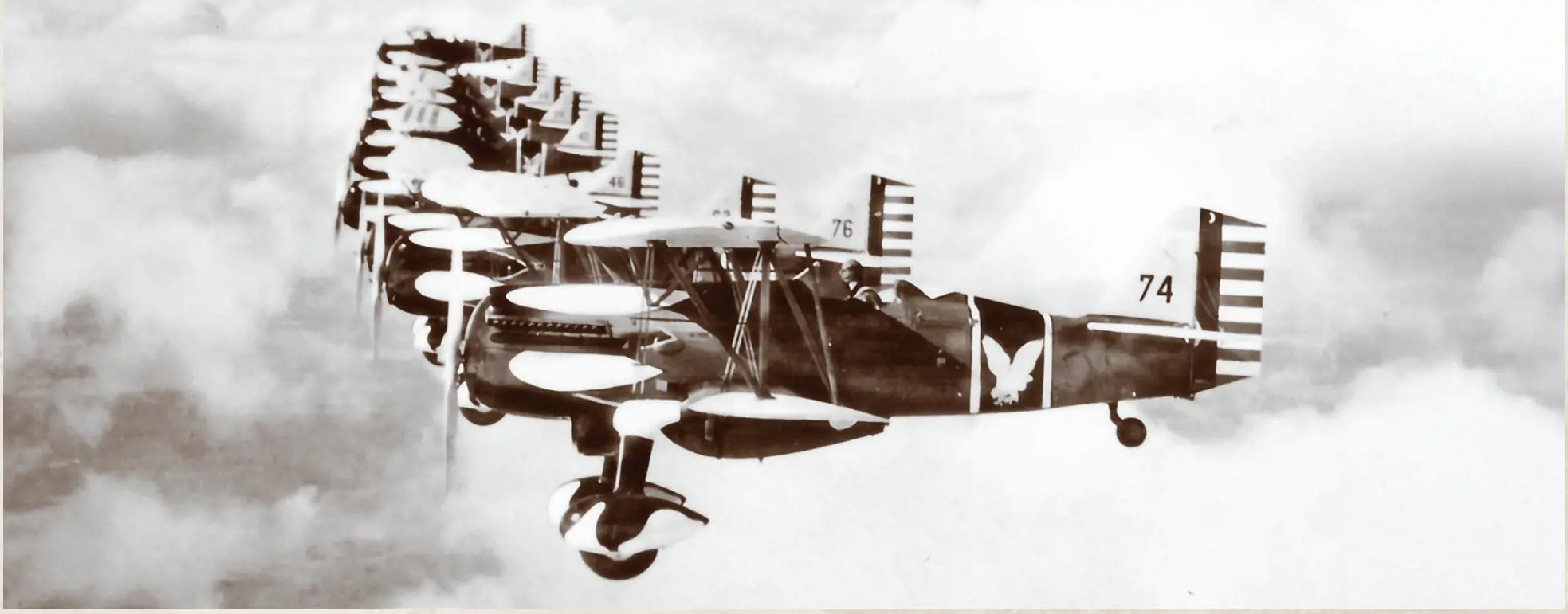


Couple of intrepid aviators pose with their surplus Standard J-1 on the Tonto Plateau in Arizona's Grand Canyon. Pilot R.V. Thomas (left) was known for his daredevil flying and he became the first pilot to land in the Grand Canyon, this event taking place on 8 August 1922.

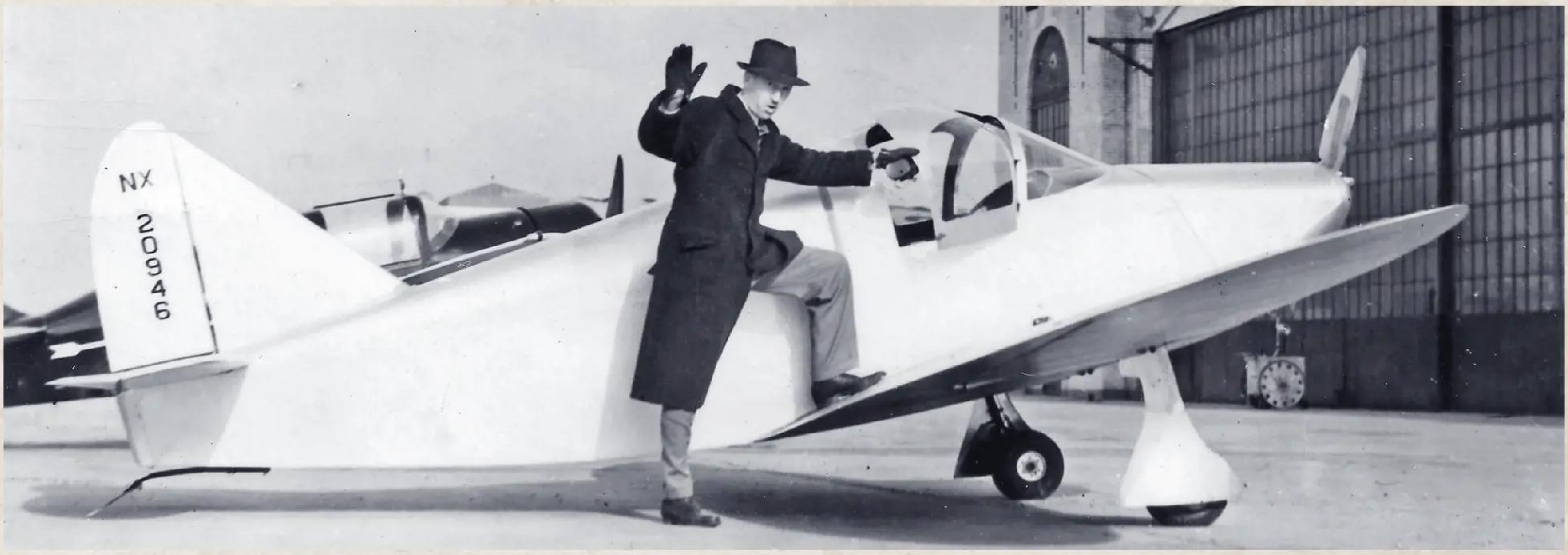
Pioneering female pilot Ruth Nichols obtained use of this 1928 Lockheed Model 5 Vega Special that carried the civil registration NR496M. The advanced Lockheed was owned by Powell Crosley Jr. and Ruth hoped to set a bunch of records with the craft. On 22 June 1931, she took off from New York and headed for St. Johns, New Brunswick, where she hoped to begin a transatlantic flight and become the first woman pilot to accomplish the feat solo. However, she crashed on landing and spectators can be seen peering at the camera aircraft flying overhead. The first solo crossing by a female pilot would take place the following spring when Amelia Earhart made the hazardous journey.



With the end of WWII, rapidly expanding American airlines needed a replacement for the Douglas DC-3. While it was never completely replaced, one of the more modern new series of airliners was the Convair 240 series. This Model 340 was one of a number operated by Delta.

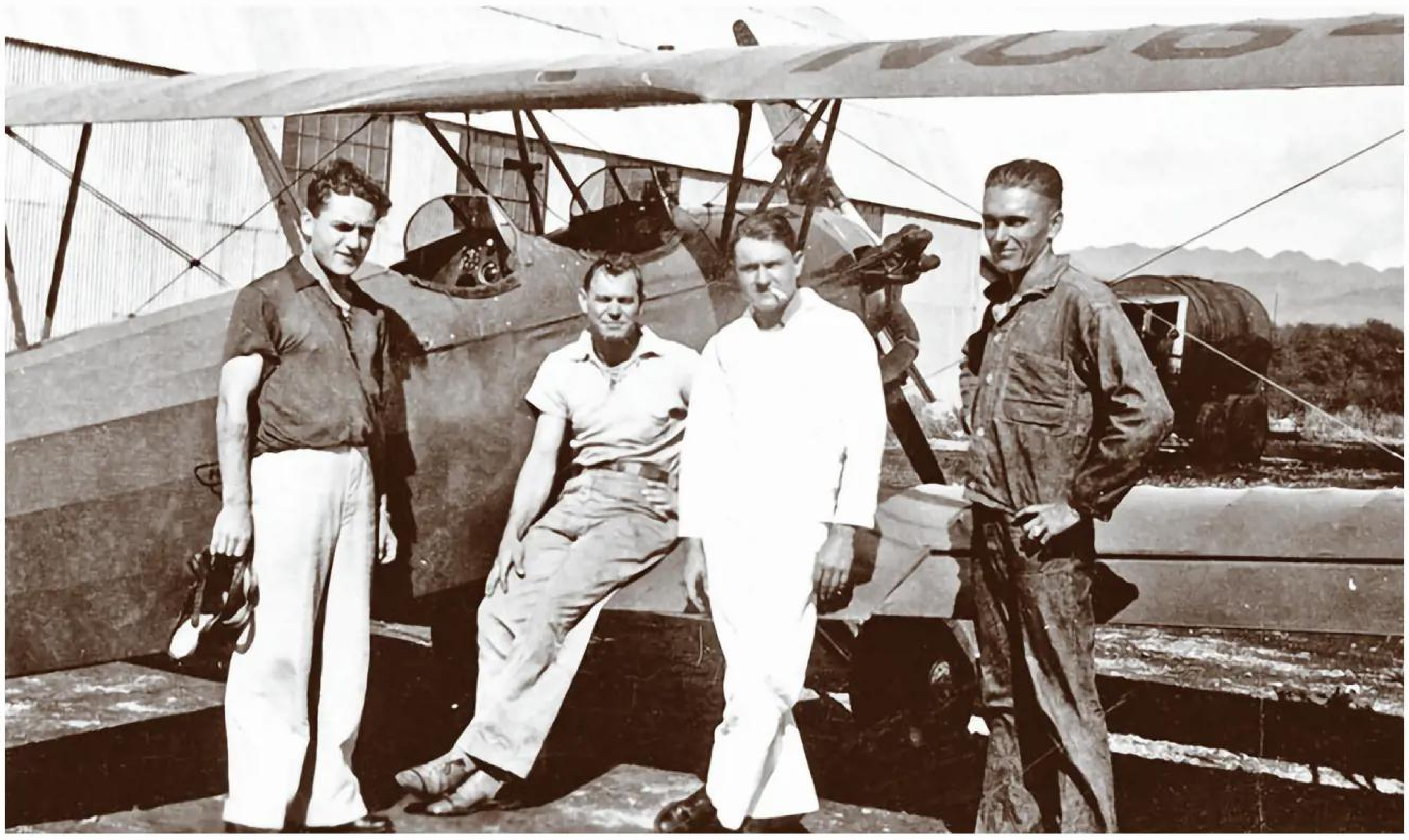


One of the most attractive biplane fighters operated by the Army Air Corps was the Curtiss P-6E. Only 46 P-6Es were built and it was the last biplane fighter built in quantity for the Army. This line-abreast formation of P-6Es was led by Capt. Ross Hoyt, commander of the 17th Pursuit Squadron, 1st Pursuit Group, whose fighters were painted as stylized Hawks. Power came from a Curtiss Conqueror V-1750C that produced 700-hp to give a top speed of 193-mph. Today, only one original P-6E survives and it is with the National Museum of the USAF.



Factory pilot prepares to go aloft in the prototype of the Culver Cadet. Registered NX20946, the all-wood, two-seat side-by-side personal aircraft was designed by Al Mooney, who would go on to gain fame with his own aircraft company. The Cadet was developed from the earlier Culver Dart (an example can be seen immediately behind the prototype). The prototype first flew on 2 December 1939 and about 600 of various variants would be constructed along with a target drone version for the Army Air Corps. **AC**

SOME THOUGHTS ON THE PEARL HARBOR ZEROS

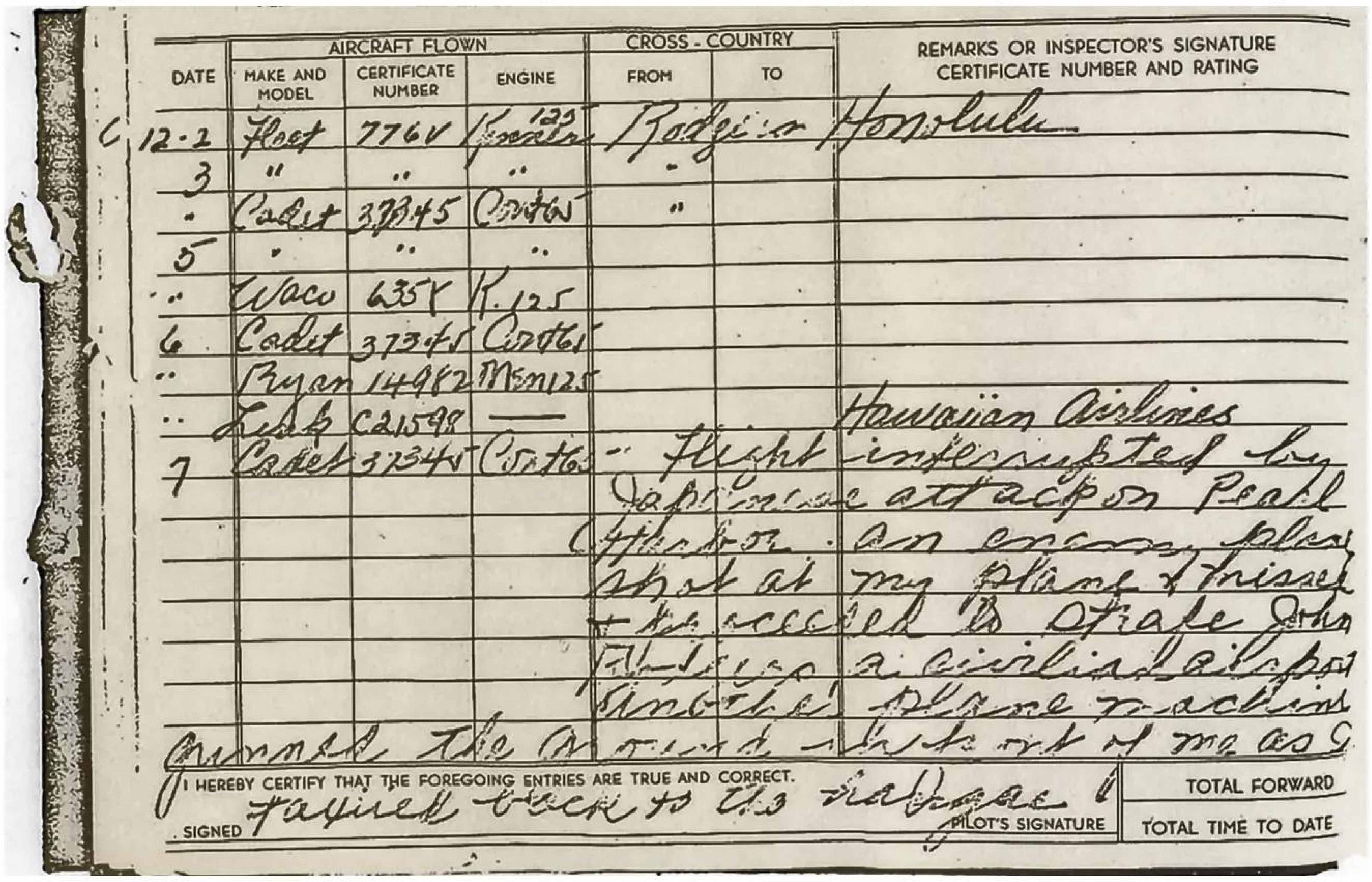


Tommy Tomberlin is on the left and Bob Tyce is on the wing with K-T's Fleet Model 2. Tyce was shot in the neck and bled to death on the ramp. He was the first civilian victim of the Japanese. Tomberlin was flying bright orange Aeronca 65TC NC3383 rented from the Hui Lele Club and was airborne with student James Cuncan when the enemy attacked. Two Zeros broke from formation and attacked the Aeronca, which received several hits. Tomberlin took the controls and dove toward the sea. He then tried to land at John Rogers Airport as Zeros, Kates, and Vals attacked Hickam Field.

EDITOR'S NOTE: The following comments are from Kalani Ogata, a resident of Oahu, Hawaii, and whose ancestry is half Hawaiian and half Japanese. He is commenting to the article on the Pearl Harbor Zeros that we ran in the September 2025 issue:

The singular mission of the Japanese airmen during the attack on Pearl Harbor was not to "kill as many Americans as possible," but rather to fatally cripple or destroy the American Pacific Fleet. In fact, the Japanese airmen had been admonished to not incur civilian casualties, due to the large presence of Japanese on the islands. Further, the Japanese considered the Americans to be anything but "lazy," and in fact they knew that they would be awakening a sleeping giant. The attack planned by Gen. Genda Minoru, which prophetically followed two separate potential attack scenarios contemplated by Americans during the 1930s (as well as by a pair of Japanese naval ensigns) all planned for an early Sunday morning attack, as it was known that this would be a day of rest and light duty for the military men, and a day of worship for the Americans. (EDITOR'S NOTE: I must have to disagree with Mr. Ogata on this point. Some 68 civilians are recorded as having been killed in the attack. The "sleeping giant" comments came only after the attack and, as history has shown, Japan had no regard for the lives of civilians. One only has to study the incidents in China as the Japanese attempted to find the Doolittle Raiders to confirm this fact.)

The premier fighters of the *Akagi's* first fighter combat unit, which was led by Lt. Itaya Shigeru in AI-155, was a group of three elements of three A6M2b Type 00 fighters. Upon reaching Kahuku Point, the northern tip of the island of Oahu, the *Akagi* fighter group turned south, flying along the eastern coastline, not the western slopes of the Koolau Mountains. Passing over the Heeia/Kaneohe ahupua'a (a form of old Hawaiian land division) and nearing the Koolaupoko area, they encountered pilot MM2c Marcus Poston, presumably in NC14730, a factory green Taylor Cub. Itaya stated he made a pass on the small plane but misjudged both their speeds and his 7.7mm machine gun bullet rounds missed the Cub entirely. His *shotai's* (a three-plane flight) two wingmen NAP1c Harano Takeshi in AI-154 and NAP1c Iwama Shinji in AI-153 made their passes and their fire struck the Cub, shattering the wooden propeller, which shook the C-65 Continental engine from its mounts. Poston elected to employ his parachute and the prevailing tradewinds carried him westward across a dip in the Koolau Mountains (above today's Wilson Tunnel) and into the upper reaches of Kalihi Valley, where a concerned female citizen called the Honolulu Sheriff's office to report the strange event (which also gave rise to a rumor of Japanese parachutists landing on Oahu). Iwama



DATE	AIRCRAFT FLOWN			CROSS - COUNTRY		REMARKS OR INSPECTOR'S SIGNATURE CERTIFICATE NUMBER AND RATING
	MAKE AND MODEL	CERTIFICATE NUMBER	ENGINE	FROM	TO	
12-2	Fleet	776V	Kinner 125	Rodgers	Honolulu	
3	"	"	"	"		
"	Cadet	37345	Contin	"		
5	"	"	"			
"	Waco	635V	K.125			
6	Cadet	37345	Contl 65			
"	Ryan	14982	Men125			
"	Link	C21598	—			Hawaiian Airlines
7	Cadet	37345	Contl 65	– flight	interrupted by Japanese attack on Pearl Harbor. An enemy plane shot at my plane & missed & proceeded to strafe John Rodgers a civilian airport. Another plane machine gunned the ground in front of me as I taxied back to the hangar.	

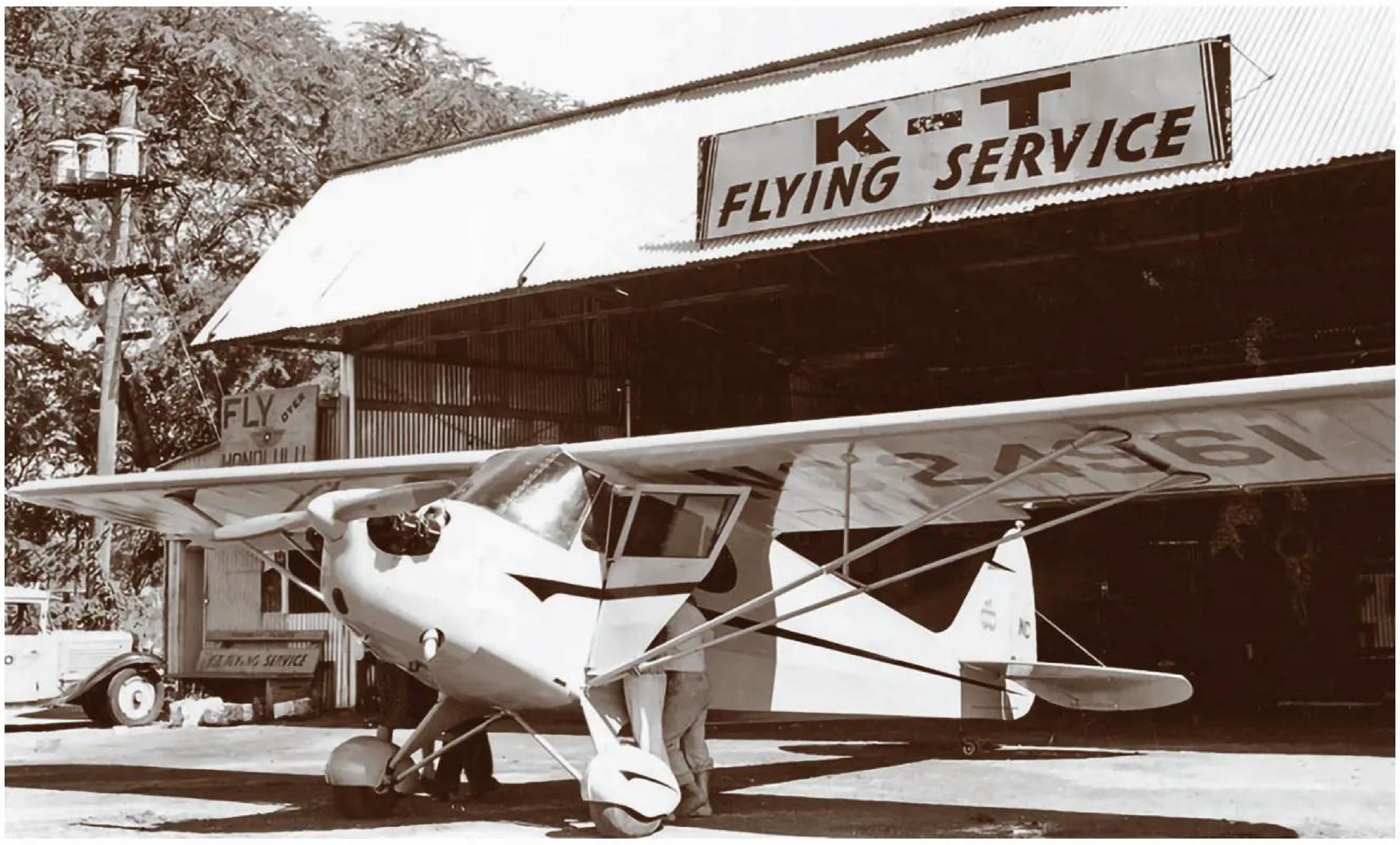
I HEREBY CERTIFY THAT THE FOREGOING ENTRIES ARE TRUE AND CORRECT.

SIGNED
PILOT'S SIGNATURE

TOTAL FORWARD

TOTAL TIME TO DATE

Cornelia Fort was flying Interstate Cadet NC32345 when the Zeros attacked her. As she notes in her log, they missed.



Piper J-4A Cub Coupe NC24961 in front of the K-T Flying Services hangar. The registration for this aircraft was cancelled on 19 October 1955.

and Hirano (posthumously) were awarded the credit for the Taylor Cub as ½ victory per pilot.

The “pair of brightly-colored light civilian training aircraft” seen by Itaya were likely two rented K-T (Knox & Tyce) Flying Service Piper Cubs flown by US Army members Clyde Brown in NC26950 and Henry Blackwell in NC35111, one of which was shot down by Yamamoto Akira (credited with one victory) from the *Kaga* in Zero AII-168. The other simply fell out of the sky crashing into the water just off the current Reef runway at the Honolulu Airport, as witnessed by a crewmember of a yard tug. (EDITOR’S NOTE: It probably “fell out of the sky” for good reason — being hit multiple times by enemy bullets. See more comments later in this letter) Tyce was shot in the throat and killed by strafing fighters after he landed at the airport during the attack.

Yamamoto would later be reprimanded for attacking and shooting down the civilian plane. When Capt. Fuchida Mitsuo was given an audience with Emperor Hirohito to debrief the mission, the Emperor specifically asked if any civilian casualties had occurred, to which Fuchida admitted that “three or four civilian airplanes were shot down” and he further acknowledged that a green civilian plane had been destroyed in the air.

As the *Akagi* fighters continued on passing high over the island and descending down around Diamond Head, they came into the Hickam Field area at 0805, and the first fighter combat unit engaged one of the B-17s arriving from Hamilton Field, California. Itaya’s *buntai* (team) tore into Swenson’s B-17C, along with shots by Lt. Ogawa Shoichi in his Type 97 Kate. One of these attacks ignited the flare locker on board the B-17, which resulted in its destruction after landing.

One of the Zeros was flown by Hirano Takeshi, who, in the excitement and terror of the attack, failed to maintain his altitude and flew so low as to strike his propeller on the main road through Fort Kamehameha, on the eastern side of the opening to Pearl Harbor. In his struggle to climb, Hirano’s plane made a severe bank — stalling the wing and forcing the plane into a course reversal which took him into a coconut tree. The collision with the tree probably was responsible for his death, as the coconut frond’s large solid ribs can be seen in the cockpit of his Zero as it rested at the doorway of Building 52, the ordnance shop at Fort Kamehameha. This incident was related by *Akagi’s* second *shotai* leader, Ibusuki Masanobu. (Years later, this writer was able to acquire the starter handle and a small piece of fabric from the Hirano plane).

War prize “souveniring” was unlikely, as anyone doing so would be subject to severe punishment. (EDITOR’S NOTE: Rules are made to be broken. All the shot-down Japanese aircraft had bits and pieces removed by sailors and others involved. For years afterward, these items would resurface and a few would even make it decades later onto eBay.) A Honolulu newspaper carried a small article about a local man, Shinichi Kaya, being sentenced to two years at hard labor for removing a small piece of a Japanese D3A1 BII-214 flown by

HAWAIIAN AIRLINES

It would appear that the same Zero that killed Bob Tyce also strafed a Hawaiian Airlines DC-3 but fortunately no one was hit even though the DC-3 was hit in numerous locations. Two Cubs that had taken off from the field never returned. They were being flown by Army soldiers on their day off — Clyde Brown was in J-3C-50 NC26950 and his friend Henry Blackwell was in J-3C-65 NC35111 while another friend, Warren Rasmussen was probably with Blackwell. Norman Rapue was a sailor aboard tug *YT-135* and he would tell the *Honolulu Star-Bulletin* that he saw the yellow Cubs ahead of the tug being attacked by Japanese aircraft. “They didn’t have a chance,” he told a reporter. “Both were cruising about 2.5 miles offshore at about 500-ft when seven Japanese planes swooped down. One of the yellow [civilian] planes plummeted straight down into the ocean while the other circled for a moment then plunged down.” The three young Army men were the first American military personnel killed by the Japanese in WWII.

Aviation Models
Desktop, Diecast, Balsa Kits, & Custom Models
www.aviation-models.com
P.O. Box 542
Sandisfield, MA 01255
(800) 591-4823
Check out our sister website.
The Aviation History Online Museum
www.aviation-history.com

Kiyomura Isamu and Shimizu Yoshio, from the *Hiryu*, which crashed near Aiea, northeast of Pearl Harbor.

Concerning the Ni'ihau incident, Nishikaichi Shigenori in BII-120 from the *Hiryu*, was leaking fuel as his tank(s) was hit by ground fire at Naval Air Station, Kaneohe Bay. Nishikaichi elected to land on the island of Ni'ihau, which was the pre-determined submarine pickup point for aircrews that were not able to return to the fleet. Nishikaichi attempted to land on a flat area when he struck a fence line that ripped the landing gear out from under the airframe and the aircraft came to rest near the home of Howard Kaleaohano. Kaleaohano relieved Nishikaichi of his pistol, searched him and took away some papers he was carrying. Nishikaichi was taken to the home of Joseph Kele and fed a meal and then was taken on 10 December to the home of Harada Ishimatsu, a Japanese man living on the island of Ni'ihau. Nishikaichi attempted to escape but he was subdued after shooting Benjamin "Benny" Kanahele. Benny, maddened by pain, smashed Nishikaichi's head against a rock wall. Benny's wife, Ella, then cut Nishikaichi's throat, nearly removing his head, to ensure the pilot was dead.

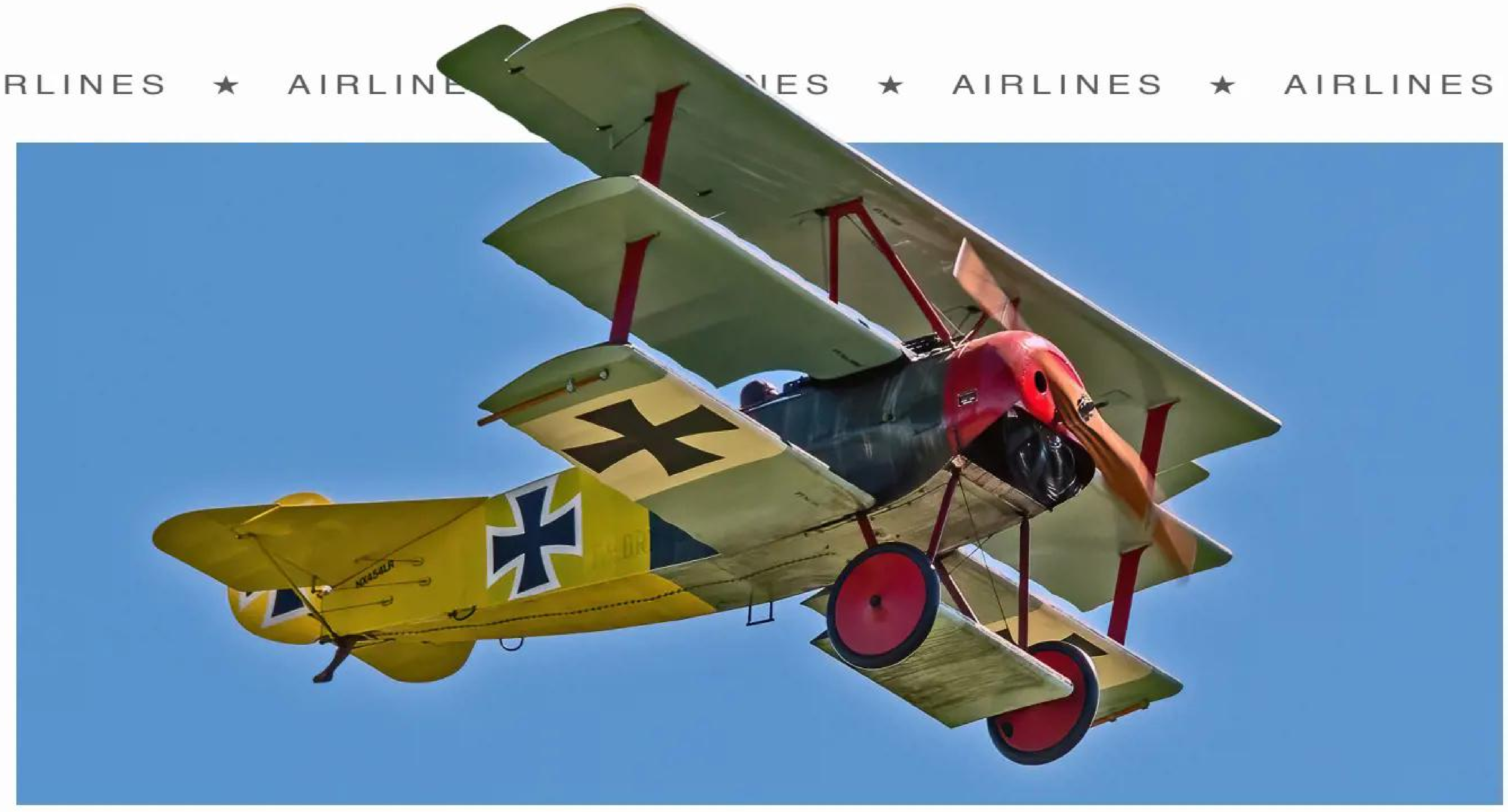
Other Zeros lost on the day of the Pearl Harbor attack were those of Ishii Saburo, NAP1c in BI-153 and Atsumi Takeshi, NAP1c, both from the second wave launched from the *Soryu*. Second *shotai* leader from Lt. Iida Fusada's *buntai* stated that he observed that both the planes of Ishii and Atsumi were leaking fuel and Atsumi was forced down into the waters off Kauai's north shore. Similarly, Ishii was forced down into the sea off the eastern shore of Ni'ihau.

ROTARY FOKKER

Another great issue! I never knew so many photos existed of the China Mustangs. Wish somebody would restore and paint a B/C variant with the China shark mouth but I am sure most people would think it was a strange-looking P-40. "Cost of War" and "Color of War" are still my favorites — keep them coming.

The photo of Javier Arango's Fokker

ENTER TO WIN THIS WWII JEEP
AND HELP SUPPORT THE AMERICAN HERITAGE MUSEUM!
READY TO DRIVE AND COMES WITH REPLICA 50 CAL!
GET TICKETS NOW AT 44JEEP.COM
ROAD TO Victory SWEEPSTAKES
American Heritage Museum
GET 50% MORE BONUS ENTRIES WITH CODE "AIRCLASSICS"



With its rotary spinning away, the Golden Age Dr. 1 climbs out. (B. Becker)

The Dr. 1 taxiing at it home field at Bethel, Pennsylvania. (B. Becker)

Dr. 1 reminded me of the Golden Age Air Museum's replica Dr.1 that I photographed last August at their Military Heritage Weekend. It is also powered by a LeRhone rotary engine. I consider the Golden Age Air Museum as a small Old Rhinebeck — not a bad thing. It is very easy to get clean photos at their field.

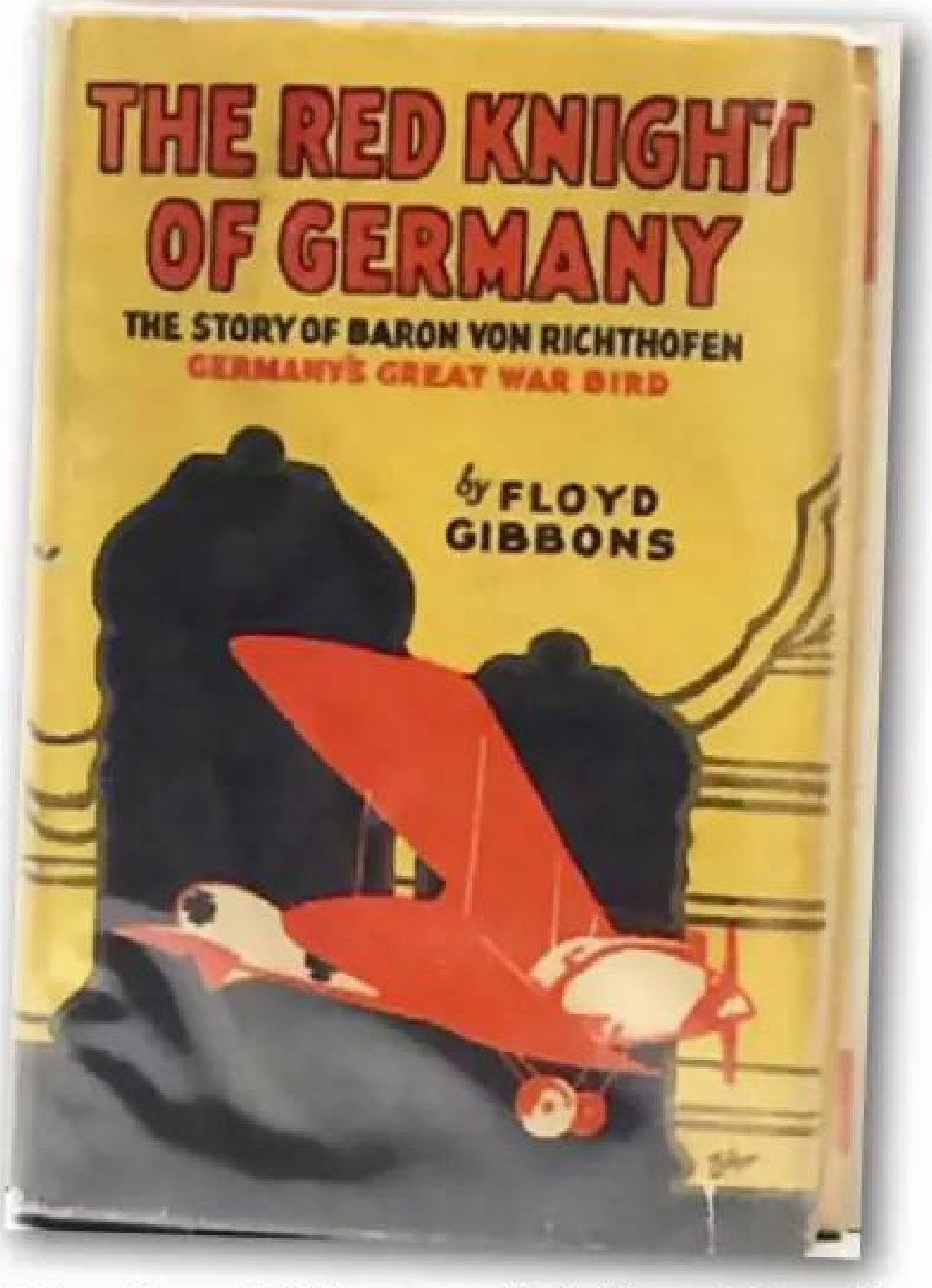
Bob Becker
East Petersburg, PA

FAVORITE BOOKS

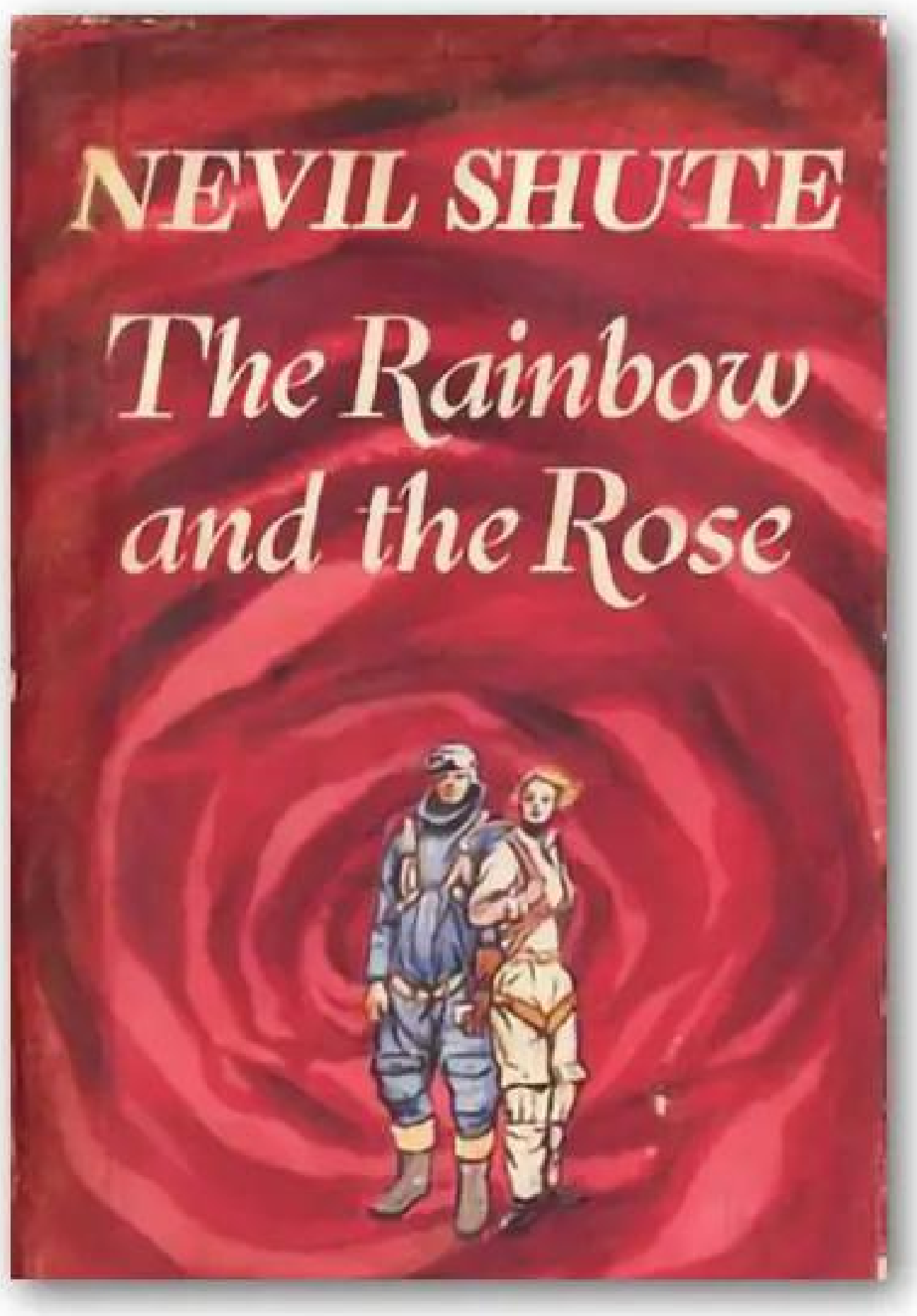
First, thank you for including Ben Marsh's great WWI article in the November issue. Regarding aviation books I have to say my interest in aviation and books has been closely tied and it's hard to say which came first. However, when my older brother left home to go out in the world (I was six-years-old at the time), among the things he left behind was a book on WWI aviation. So, the hook was set. Books about aviation! With pictures! Who knew? And I still have that book along with a thousand or so others on my shelves. The book was a 1927 first edition of Floyd Gibbons *The Red Knight of Germany*. While later researchers have found mistakes with the book, I believe those are offset by the inclusion of interviews the author did with living airmen who had flown against the Red Baron — and lost.

A book that anyone who may have an interest in aviation would likely do well to read is *The Rainbow and the Rose* by Nevil Shute. I got a paperback copy while in high school and it certainly reinforced my interest in aviation — where I earned my living for a very long time.

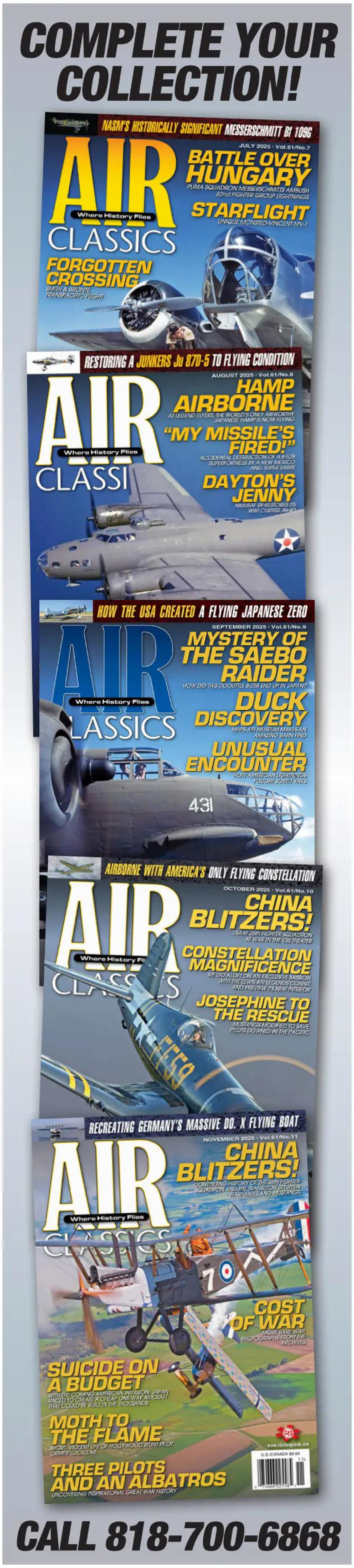
Fulton Cook
Via email



First edition of *The Red Knight of Germany*.



Nevil Shute's *The Rainbow and the Rose* is an exciting aviation tale.



COMPLETE YOUR COLLECTION!

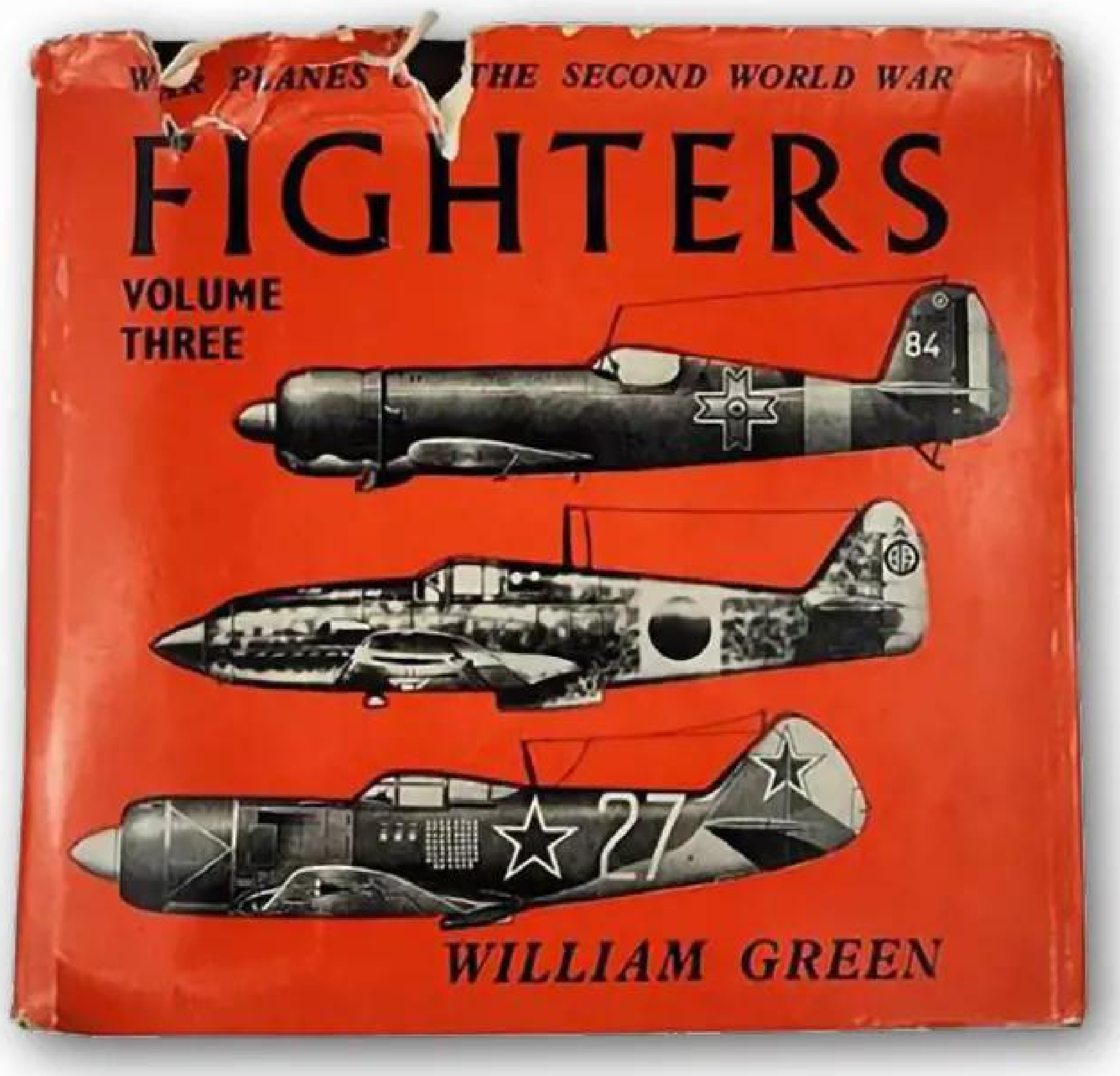
CALL 818-700-6868

STATEMENT OF OWNERSHIP, Management and Circulation: PublicationTitle: AIR CLASSICS; Publication Number: 0002-2241; Filing Date: 9/30/2024; Issue Frequency: Monthly; Number of Issues Published Annually: 12; Annual Subscription Price: US $79.95; Complete Mailing Address of Known Office of Publication: 9800-D TOPANGA CANYON BLVD #368 CHATSWORTH, CA 91311; Complete Mailing Address of the Headquarters of General Business Offices of the Publisher: SAME AS ABOVE.; Full Names and Complete Mailing Address of Publisher, Editor, and Managing Editor: MICHAEL D O'LEARY, PUBLISHER. MICHAEL D. O'LEARY, EDITOR; Owner(s): CHALLENGE PUBLICATIONS, INC. 9800-D TOPANGA CANYON B;VD #368, CHATSWORTH, CA 91311.; Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or more of the Total Amount of Bonds, Mortgages or Other Securities: MICHAEL D O'LEARY, 9800-D TOPANGA CANYON BLVD #368, CHATSWORTH, CA 91311; The Tax Status has not changed during the preceding 12 months.; Publication Title: AIR CLASSICS; Issue Date for Circulation Data Below: OCTOBER 2025; Extent & Nature of Circulation: Average No. Copies Each Issue; No. Copies of Single Issue During Preceding 12 Months, Published Nearest to Filing Date; Total Number of Copies (Net Press Run): 48,510, 48,.650; Legitimates Paid and/or Requested Distribution, Outside county Paid, requested Mail Subscriptions-12,150,12,260 as Stated on PS Form 3541; In-County Paid/Requested Subscriptions Stated 0, 0 On Ps Form 3541; Sales Through Dealers and Carriers, Street 21,055, 21,730; Vendors, Counter Sales, and Other Paid Distribution Outside USPS; Requested copies Distributed by Other Mail Classes: 200, 200; Through the USPS; Total Paid and/or Requested Distribution: 33405, 34,190; Nominal Requested Distribution; Outside-County Non-Requested Copies Stated: 400, 450 on PS Form 3541; Free or Nominal Rate In-County Included on PS Form 3541: 0, 0; Non requested Copies Distributed through the USPS by Other: 0, 0; Classes of Mail; Non Requested copies Distributed Outside the Mail: 350, 410; Total Non-requested Distribution: 14,355, 13,600; Total: 48,510, 48,650; Percent Paid: 97.33%, 97.15%; Electronic Copy Circulation: Paid and Requested Electronic Copies: Total requested and Paid Print Copies (Line 15c) + Paid Electronic: 0, 0; Copies (Line 16a); Total Print Distribution (Line15f) + Paid Electronic Copies (Line 16a); Total Requested Copy distribution (line 15c) + Requested/Paid: 34,195, 35,050; Electronic Copies: Electronic copies Percent Paid (Both print & Electronic Copies); (16b divided by 16c x 100): 97.33%, 97.15%; X I certify that 50% of all my distributed copies (electronic and paid print) are paid above a nominal price.; Publication of Statement of Ownership is required and will be printed in the DECEMBER 2025 issue of this publication. I certify that all information furnished on this form is true and complete: MICHAEL D O'LEARY, PRESIDENT

Pratt & Whitney Engines and Parts
Zero-Time Engines in Stock
Complete Stock of Parts, Tools, and Accessories
R-985 • R-1340
R-1340 Geared
R-1830-92 and -94
R-2000 • R-2800
• Complete OHC R-985 and R-1340 Cylinder Assemblies — All with New Pistons • Also, OHC and New R-1830s and R-2800 CBs • Engine and Carb Gasket Kits • R-985 No-Blow Gaskets • Top OH Tool Kits • Spark Plugs
• Engine Mounts • Magnetos
• Carbs • Starters • Governors
• Fuel Pumps • Boost Pumps
• Maintenance and OH Manuals
CALL FOR BEST OUTRIGHT PRICES!
Sun Air Parts
Ph: 661-257-7708 • Fx: 661-257-7710
26007 Huntington Lane, Valencia, CA 91355
Info@SunAirParts.com
SE HABLA ESPAÑOL

Growing up, I had an interest in history so the 1960s war movies and TV series such as *Combat* and *Twelve O'Clock High* were a staple. I also did the traditional building of models — switching back and forth from airplanes to ships to tanks to cars.

My father traveled as part of his job. On one trip, he returned and handed me a copy of William Green's *War Planes of the Second World War, Volume 3.* I don't remember how old I was (probably early teens) but I was hooked and started on my life-long aviation interest. Instead of Boy Scouts I joined the Civil Air Patrol and when I graduated from high school, I knew I was going into the Air Force via ROTC. I was hoping to be a pilot but that was not to be but I enjoyed a fulfilling career including combat crew on Minutemen missiles and Weapons Test Manager on the B-2 (while it was still in the Black World) responsible for working nuclear certification.



Here is Volume Three of William Green's *Warplanes of the Second World War.* In the opinion of the Editor, any book by Bill Green is worth getting today because his research was stupendous.

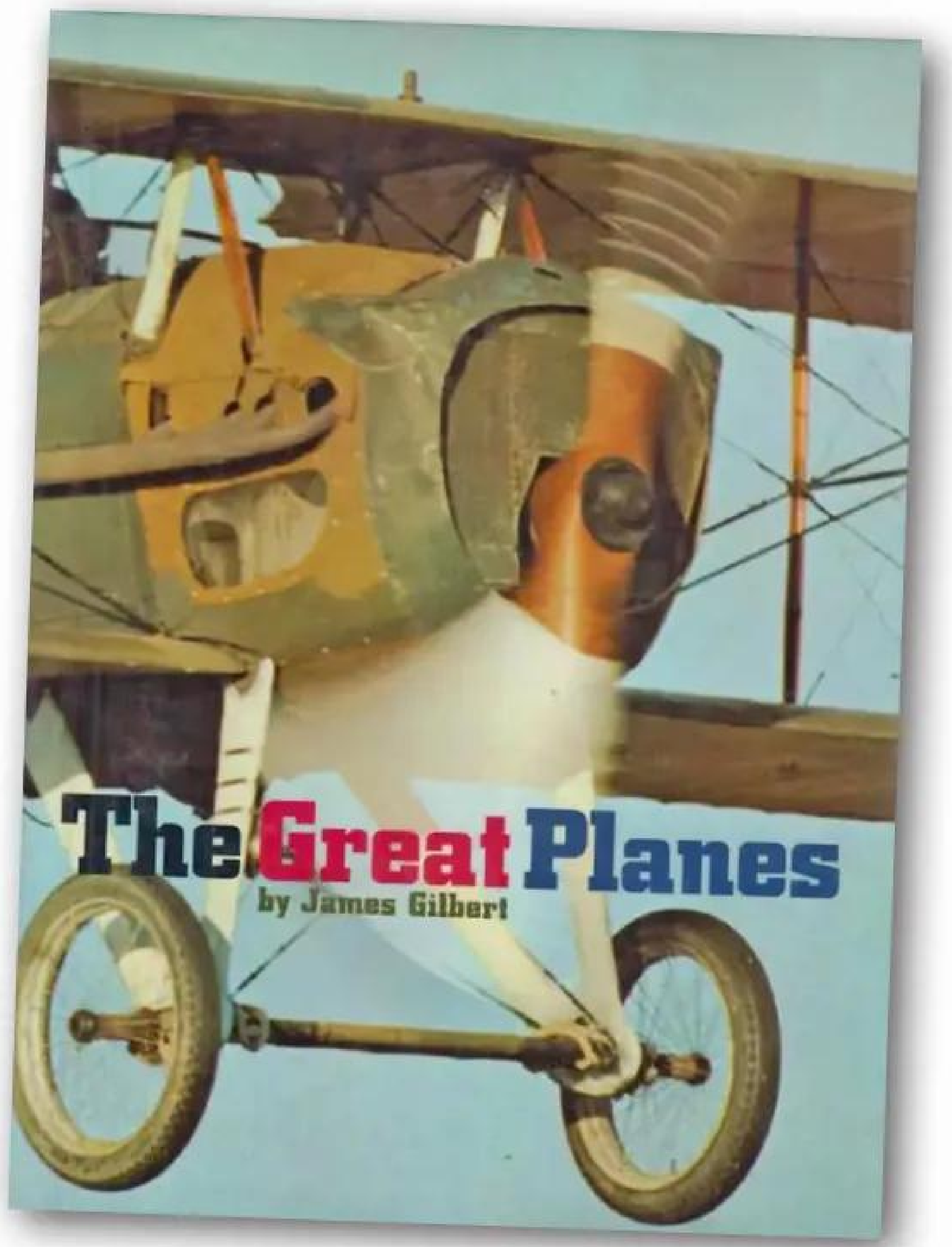
As far as that book — it is still part of my vast library (I stopped counting at 6000 books and an unknown number of magazines, including every issue of *Air Classics*). At age 70, I am still actively collecting, reading, and researching aviation.

Bill Scrivens
Via email

When I was nine, my father took a job in Anaheim, California — a very long way from rural New Jersey where I grew up. There were a lot of changes to everything in life at that time and, initially, it wasn't really pleasant. The school library had *The Great Planes* by James Gilbert. It did not have a dust cover but rather a bright orange library vinyl cover. I was the person who checked it out time after time, and over several months I had read many of its chapters a hundred times. It was the only book on planes that the school really had that was detailed enough for me.

The book made a huge impression and once I became a pilot, I found I was in fact chasing many of those types that James Gilbert had thought of as "Great," He missed a couple that I found but the book is now to me a greatest hits of airplane goals. I am hoping to fly a few of them I haven't yet met.

Joe Scheil
Via email **AC**



James Gilbert's *Great Planes* features an incredibly battered WWI SPAD on the cover. Gilbert (1935-2006) was a brilliant writer who owned *Pilot* magazine in the UK and his opinions were definitely non-PC. I met him at an airshow while he was doing amazing things with his Bucker Jungmeister G-AYSJ and he seemed genuinely surprised that an American would know who he was. Please keep your comments coming in on memorable aviation books to *moleary2challenge@gmail.com.*

WE KEEP THE WARBIRDS FLYING!

MERLIN ENGINES FROM VINTAGE V-12s KEEP THE HAWKER HURRICANES READY TO SCRAMBLE

WHEN THE SECOND WORLD WAR ERUPTED DURING SEPTEMBER 1939, THE MOST NUMEROUS FIGHTER OPERATED BY THE ROYAL AIR FORCE WAS THE HAWKER HURRICANE. IMMEDIATELY GOING INTO ACTION, THE HURRICANES HELPED TO SLOW THE GERMAN BLITZKRIEG. THE HURRICANE WOULD FIGHT FROM THE FIRST DAY TO THE LAST DAY OF THE WAR. TODAY, MOST OF SURVIVING HURRICANES ARE POWERED BY MERLINS FROM VINTAGE V-12s. WE ALSO SUPPLY THE MAJORITY OF MERLIN, GRIFFON, AND ALLISON ENGINES FOR THE WORLD'S WARBIRDS

CONTACT: JOSE FLORES
VINTAGE V-12s, Inc.
1582 Goodrick Drive #1, Tehachapi, CA 93561
Phone: 661-822-3112 • Fax: 661-822-3120
VISIT OUR WEBSITE: www.vintageV12s.com

BOEING
B-29A
SUPERFORTRESS

JACK'S HACK
55

BOEING B-29A SUPERFORTRESS
OWN A PIECE OF HISTORY
PLANETAGS
B-29A BOMBER
SUPERFORTRESS
GENUINE SKIN
# 0117 OF 3,850
PLANE TAGS
LIMITED EDITION GENUINE SKIN
SR-71 BLACKBIRD
NORTH AMERICAN F-86L SABRE
F-86L
GENUINE SKIN
SABRE
GENUINE SKIN LIMITED EDITION
BELL AH-1W SUPERCOBRA
AH-1W
SUPERCOBRA
GENUINE SKIN
GENUINE SKIN LIMITED EDITION
BEECHCRAFT JRB-6 EXPEDITOR
JRB-6 EXPEDITOR
GENUINE SKIN
# 0106 OF 3,500
BuNo 39957
Beechcraft
BY TEXTRON AVIATION

PlaneTags are created from authentic aviation skins.
Visit our collection at www.planetags.com or download the mobile app.

ANDROID APP ON Google play
Download on the App Store

PLANETAGS.COM

MOTOART PLANETAGS LLC | TORRANCE, CA 90501